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<210> 1418

<211> 1532

<212> PRT

<213> Homo sapiens

<400> 1418

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Met Lys Gly Ala Arg Trp Arg Arg Val Pro Trp Val Ser Leu Ser Cys
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Leu Cys Leu Cys Leu Leu Pro His Val Val Pro Gly Thr Thr Glu Asp
              20              25              30
Thr Leu Ile Thr Gly Ser Lys Thr Pro Ala Pro Val Thr Ser Thr Gly
 35              40              45
Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
 50              55              60
Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
 65              70              75
Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
 85              90              95
Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
100              105              110
Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
115              120              125
Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
130              135              140
Met Thr Thr Ser Thr Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
145              150              155
Thr Ala Gly Thr Glu Ser Ser Thr Pro Val Thr Ser Ala Val Ser Ile
165              170              175
Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
180              185              190
Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
195              200              205
Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
210              215              220
Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
225              230              235
Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
245              250              255
Ser Val Thr Asn Thr Ser Met Met Thr Ser Glu Lys Ile Thr Val Thr
260              265              270
Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
275              280              285
Pro Val Thr Gly Ser Leu Met Pro Val Thr Ser Ala Ala Leu Val Thr
290              295              300
Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
305              310              315
Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
325              330              335
Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
340              345              350
Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
355              360              365
Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
370              375              380
Pro Ser Ser Val Ser Asn Thr Phe Leu Val Thr Ser Lys Val Phe Arg

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385          390          395          400
Met Pro Ile Ser Arg Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
          405          410          415
Leu Ser Val Ser Gly Thr Ile Ser Ala Ile Thr Ser Lys Val Ser Thr
          420          425          430
Ile Trp Trp Ser Asp Thr Leu Ser Thr Ala Leu Ser Pro Ser Ser Leu
          435          440          445
Pro Pro Lys Ile Ser Thr Ala Phe His Thr Gln Gln Ser Glu Gly Ala
          450          455          460
Glu Thr Thr Gly Arg Pro His Glu Arg Ser Ser Phe Ser Pro Gly Val
465          470          475          480
Ser Gln Glu Ile Phe Thr Leu His Glu Thr Thr Thr Trp Pro Ser Ser
          485          490          495
Phe Ser Ser Lys Gly His Thr Thr Trp Ser Gln Thr Glu Leu Pro Ser
          500          505          510
Thr Ser Thr Gly Ala Ala Thr Arg Leu Val Thr Gly Asn Pro Ser Thr
          515          520          525
Gly Ala Ala Gly Thr Ile Pro Arg Val Pro Ser Lys Val Ser Ala Ile
          530          535          540
Gly Glu Pro Gly Glu Pro Thr Thr Tyr Ser Ser His Ser Thr Thr Leu
545          550          555          560
Pro Lys Thr Thr Gly Ala Gly Ala Gln Thr Gln Trp Thr Gln Glu Thr
          565          570          575
Gly Thr Thr Gly Glu Ala Leu Leu Ser Ser Pro Ser Tyr Ser Val Thr
          580          585          590
Gln Met Ile Lys Thr Ala Thr Ser Pro Ser Ser Ser Pro Met Leu Asp
          595          600          605
Arg His Thr Ser Gln Gln Ile Thr Thr Ala Pro Ser Thr Asn His Ser
          610          615          620
Thr Ile His Ser Thr Ser Thr Ser Pro Gln Glu Ser Pro Ala Val Ser
625          630          635          640
Gln Arg Gly His Thr Gln Ala Pro Gln Thr Thr Gln Glu Ser Gln Thr
          645          650          655
Thr Arg Ser Val Ser Pro Met Thr Asp Thr Lys Thr Val Thr Thr Pro
          660          665          670
Gly Ser Ser Phe Thr Ala Ser Gly His Ser Pro Ser Glu Ile Val Pro
          675          680          685
Gln Asp Ala Pro Thr Ile Ser Ala Ala Thr Thr Phe Ala Pro Ala Pro
690          695          700
Thr Gly Asp Gly His Thr Thr Gln Ala Pro Thr Thr Ala Leu Gln Ala
705          710          715          720
Thr Pro Ser Ser His Asp Ala Thr Leu Gly Pro Ser Gly Gly Thr Ser
          725          730          735
Leu Ser Lys Thr Gly Ala Leu Thr Leu Ala Asn Ser Val Val Ser Thr
          740          745          750
Pro Gly Gly Pro Glu Gly Gln Trp Thr Ser Ala Ser Ala Ser Thr Ser
          755          760          765
Pro Asp Thr Ala Ala Ala Met Thr His Thr His Gln Ala Glu Ser Thr
770          775          780
Glu Ala Ser Gly Gln Thr Gln Thr Ser Glu Pro Ala Ser Ser Gly Ser
785          790          795          800
Arg Thr Thr Ser Ala Gly Thr Ala Thr Pro Ser Ser Ser Gly Ala Ser
          805          810          815
Gly Thr Thr Pro Ser Gly Ser Glu Gly Ile Ser Thr Ser Gly Glu Thr

```


820	825	830
Thr Arg Phe Ser Ser Asn Pro Ser Arg Asp Ser His Thr Thr Gln Ser		
835	840	845
Thr Thr Glu Leu Leu Ser Ala Ser Ala Ser His Gly Ala Ile Pro Val		
850	855	860
Ser Thr Gly Met Ala Ser Ser Ile Val Pro Gly Thr Phe His Pro Thr		
865	870	875
Leu Ser Glu Ala Ser Thr Ala Gly Arg Pro Thr Gly Gln Ser Ser Pro		
885	890	895
Thr Ser Pro Ser Ala Ser Pro Gln Glu Thr Ala Ala Ile Ser Arg Met		
900	905	910
Ala Gln Thr Gln Arg Thr Arg Thr Ser Arg Gly Ser Asp Thr Ile Ser		
915	920	925
Leu Ala Ser Gln Ala Thr Asp Thr Phe Ser Thr Val Pro Pro Thr Pro		
930	935	940
Pro Ser Ile Thr Ser Ser Gly Leu Thr Ser Pro Gln Thr Gln Thr His		
945	950	955
Thr Leu Ser Pro Ser Gly Ser Gly Lys Thr Phe Thr Thr Ala Leu Ile		
965	970	975
Ser Asn Ala Thr Pro Leu Pro Val Thr Tyr Ala Ser Ser Ala Ser Thr		
980	985	990
Gly His Thr Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
995	1000	1005
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Val Ser Thr		
1010	1015	1020
Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Ser		
1025	1030	1035
Gly His Ala Thr Ser Leu Pro Val Thr Asp Ala Ser Ser Leu Ser Thr		
1045	1050	1055
Gly His Ala Thr Ser Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
1060	1065	1070
Gly His Ala Thr Leu Leu His Val Thr Asp Ala Ser Ser Ala Ser Thr		
1075	1080	1085
Gly His Thr Thr Ser Leu Pro Val Thr Asp Ala Ser Ser Val Ser Thr		
1090	1095	1100
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		
1105	1110	1115
Gly Asp Thr Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
1125	1130	1135
Gly His Ala Thr Pro Leu His Val Thr Ser Leu Ser Ser Val Ser Thr		
1140	1145	1150
Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Ser		
1155	1160	1165
Gly His Ala Thr Ser Leu Pro Val Thr Asp Ala Ser Ser Val Ser Thr		
1170	1175	1180
Gly His Ala Thr Ser Leu Pro Val Thr Ile Pro Ser Ser Ala Ser Ser		
1185	1190	1195
Gly Asp Ala Thr Ser Leu Pro Val Thr Ser Leu Ser Ser Leu Ser Thr		
1205	1210	1215
Gly His Ala Thr Pro Leu Pro Val Thr Ser Leu Ser Ser Ala Ser Thr		
1220	1225	1230
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		
1235	1240	1245
Gly His Ala Thr Ser Leu Leu Val Thr Asp Ala Ser Ser Val Ser Thr		

```

1250          1255          1260
Gly His Ala Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr
1265          1270          1275          1280
Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr
          1285          1290          1295
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr
          1300          1305          1310
Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr
          1315          1320          1325
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr
          1330          1335          1340
Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr
1345          1350          1355          1360
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr
          1365          1370          1375
Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
          1380          1385          1390
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
          1395          1400          1405
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
          1410          1415          1420
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr
1425          1430          1435          1440
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr
          1445          1450          1455
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr
          1460          1465          1470
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
          1475          1480          1485
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr
          1490          1495          1500
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr
1505          1510          1515          1520
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser
          1525          1530

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<210> 1419

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1419

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gagggtccct tgatggaat caagtattgt actggtataa ttattcagga cagtggctctg
120
gattatatca tcatccgttt gtgtgggttc atgcagggtc ttattgggca atagctgttt
180
cctatactag aagagaagtc cgtctgggga actgatgtcc caactcggat tgcttacatg
240
gataccaccag acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag
300
aaactcatg
309

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<210> 1420
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1420
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys
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 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly
 20 25 30
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Arg Leu Cys
 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
 65 70 75 80
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu
 85 90 95
 Lys Ala Asn Lys Lys Leu Met
 100

<210> 1421
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1421
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 120
 gatgttagag caaagccgag ccagctgct ggcaaatgca tctgtgatgc ccattgagcag
 180
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 240
 ccctcagagc cctgattttt cacaaccca ctccctcaag cctccctgt gggcgggata
 300
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 360
 cctgacatac ttacgacat tacag
 385

<210> 1422
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1422
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg
 1 5 10 15
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu
 20 25 30
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

          35              40              45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
 50              55              60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
 65              70              75              80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
          85              90              95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
          100              105              110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
          115              120              125

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<210> 1423

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1423

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120
tgtgtcaccc tgattgatct ggagcttcac aatcctaag caatagcagt agatccaata
180
gcaggaaaaa ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
240
gatgggatga acgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
300
ctagacctag tcaacaaatt ggtttactgg gtagat
336

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<210> 1424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1424

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Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
 1              5              10              15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
          20              25              30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
          35              40              45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
          50              55              60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
 65              70              75              80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
          85              90              95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
          100              105              110

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<210> 1425

<211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

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 gcccgcatg tcgaagacct ggccttggtg ctacagggtca ttgccggtga agatggggtc
 120
 gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaagggggtg
 180
 cgagtcgctt ggtacagcga tgggtggcatt gagccggttg acgcgctcac gcacaccaca
 240
 ttgcaggcgg tcgccgatct attggacgct gaaggcgctt tgatccgcc gcccttcccc
 300
 tcggcggtta gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaatgtcc
 360
 ggcgcgcagt cgatccagct gtttcagat tgggatcagt tccgtacagc catgctgggg
 420
 ttcatggcgg actacgacat tatcctgtgc cctgtgatg ccgcgcgggc gaccaactg
 480
 ggagagacgc ggccagggct gtccagtccc ccccttccca atggcttgcc ggggtggcct
 540
 tgggtgggtg tccggggcgg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
 600
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 660
 ccgttcacgc gt
 672

<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
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 Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Leu Gln
 20 25 30
 Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
 35 40 45
 Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
 50 55 60
 Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
 65 70 75 80
 Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
 85 90 95
 Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
 100 105 110
 Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
 115 120 125
 Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
 130 135 140
 Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

145          150          155          160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
          165          170          175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
          180          185          190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
          195          200          205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
          210          215          220

```

<210> 1427

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1427

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atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
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tttgatgttc cactaagata cggggatctg gtgggtgacac ccatgcgact ggcttcggaa
120
ttgatgaag tccatccctc aggggctgta cgcttccgtc actgttcagt tccccagaat
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aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
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gcaggagaga atgacgaaag cttggctagc
270

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<210> 1428

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1428

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Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
          20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
          35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
          50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
          85          90

```

<210> 1429

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1429

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nctagggga ttatcgacat aaacgcgact gcgtaaggtt ggtgactcat cccccagcga
60

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catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcgggtgatcg ccggcgcggt ggtcaccaac atttactgca ccagcgoggt gctgcoggtg
 180
 atcgccctcg acatggggcgt cgcagtgtcg acgggtcaacc tgggtggcagg cgcggcccttg
 240
 ctgggggttg ccaccgggtt ggcggttttta ttgcccatgg gcgaccgctt tgacggcgcg
 300
 aagctgttac tcgggcagat tgcgtggcg ttctgctttg ccttggcggc ggccttttgcg
 360
 ccgaggatct gggcggtgat cggc
 384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met Thr Ser Glu Asn Ala Pro Pro Arg Gly Lys Ile Ile Met Met Ala
 1 5 10 15
 Val Ile Ala Gly Ala Val Val Thr Asn Ile Tyr Cys Thr Gln Pro Val
 20 25 30
 Leu Pro Leu Ile Ala Ser Asp Met Gly Val Ala Val Ser Thr Val Asn
 35 40 45
 Leu Val Ala Gly Ala Ala Leu Leu Gly Phe Ala Thr Gly Leu Ala Phe
 50 55 60
 Leu Leu Pro Met Gly Asp Arg Phe Asp Arg Arg Lys Leu Val Leu Gly
 65 70 75 80
 Gln Ile Ala Leu Ala Phe Cys Phe Ala Leu Ala Ala Phe Ala Pro
 85 90 95
 Arg Ile Trp Ala Leu Ile Gly
 100

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

aagcttcagg gcagggtgcc cctgaagtca agcctgattc tgcattcatc tgcattagcac
 60
 aaactggcga cacctgtgac ttgcctttc ccagggtccc tgctctccgc tccaggtagg
 120
 ctccagctga gggagggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tcttcagcat tgctcttgga gagctgtggg ctgcaccccc ctggctctcc gtccacagg
 240
 cagccccgct gtgtgtctgg tcttcagggt tggctgcagc ttctggggcc tgcttcagc
 300
 cctctctccc atgatctccc agccttgaa ggtgtaatat ttcccatgt tgctgatctt
 360
 tagtttgct cctctctctt ggctgttctt tctgctgttc catcctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tggaaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg
 60
 gacgcggcgc tcagcaatgc tgtggttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaattctacgt gcacgaacaa gtgcacgacg agtttgctc taagtttggc
 180
 gagagagtcga agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggcctagtc ggacaaagca gattcacatg tccgtgcgat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80									
Leu	Val	Asn	Glu	Ala	Ser	Gln	Asp	Lys	Ala	Glu	Ser	His	Val	Arg	Ala
				85					90					95	

Met Gln

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

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ntttctggct tatgtggttt ccccggtgtt gagtggggat ccaactcccc catagtctct
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cgtggcgatg ggacacctgg aaagtgtgtt gatgtctttg aatgtgttaa tgatacaaa
120
ccagcctgct tatttaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgcca gtgtggtgag
240
ataaaactgag agaggtacta cgtgcccgaa ggagagtgtt gccagtggtg tgaatccag
300
tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
360
cggtagcgagg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccaactgcgtt
420
gcgacccgtc cgggacagac ctgcacaaac cctgtgaaag tgcctgggga gtgttgccct
480
gtgtgcgaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgcaactctg cagggaagga ctgcattaat ggtttcaaac gcgatcaca tggttgtcgg
600
acctgtcagt gcataaacac cgaggaaacta tgttcagaac gtaaacaaag ctgcaccttg
660
aaactgtccc tcggtttcct tactgatgac caaaactgtg agatctgtga gtgcgcacca
720
aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgtgaa
780
aataagcagc gctgtgacat ctgtcgtctg aagaaatgtc cagagctctc atgcagtaag
840
natctgcccc ttgggtttcc agcaggacag tcacggctgt ctatctgca agtgcagaga
900
ggcctctgtc tcagctgggc caccatcctt gtcgggcaact tgtctcaccg tggatgggtc
960
tcatacataa atgaggaga gctggcacga tgggtgcogg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgccctga tcacctgccc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgctgcccat catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactccnnct ccatttgcca cgccccctga ggagaatact ttgtggaagg agaaacgtgg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

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gttgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggtattcctg ctgcccacag
 1320
 tgtacagatc aaccttttctg gccttctctg tcccgcaata acagcgtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgtgttcctt actgcataga agacacaatt
 1560
 ccaaaagaagg tggtgtgcca cttcagtgagg aaggcctatg ccgacgagga cgggtgggac
 1620
 cttgacagct gcacccactg ctactgcctg cagggccaga cttctgctc gaccgtcagc
 1680
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10				15		
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
		20						25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55				60					
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75				80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85						90					95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
			100					105					110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
		115					120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
		130				135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155				160	
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
				165					170				175		
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
			180					185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
			195				200					205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

```

225                230                235                240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
                245                250                255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
                260                265                270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
                275                280                285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
                290                295                300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305                310                315                320
Ser Ser

```

<210> 1437

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1437

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cgggaaactgt gctcgccac catccggtga cgggtgtcgg gcagtggcaa ctcaacaccc
60
agggcatgac cggagccatc ccgagcagca ggtgcacggc cggggcgtt gactcgtgga
120
cccgtaacct catgacctcg atgcaacttc caggtgtgtc caccgatcac atcgaccgct
180
cgggtccatgt cgatgctgag cagttcgacc ggtgctgag cgagtctctg tcccgtgggc
240
acagttcttg cctgcgcgca catggggtcc tgggacttgg cggggcctg ggtggccaga
300
cgcggtcttc ccccgagttc cgtcgcggag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1438

```

Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50          55          60

```

<210> 1439

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1439

accggtttgc ttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
 60
 tgctctcttc cacaatgtag acttaaaaaa atgccggttaa acattttacc atatgattga
 120
 gtcagggtgtg gggagtgcga gtaaacattt taccatgtga ttgagtcatg ggtggggagt
 180
 cgcggaata cacagggcag gcagttcgct atcagcatgt tctctctcat ttctgtcttt
 240
 ggtctgtctt cctgggtaat gtcacatgga gaccaggagg atctgccatc agctgtgtgc
 300
 agtggggttaa caagacgacg gggaacttca gagtgcaggc agtcctcatc ttggcagat
 360
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
 420
 cggtttcaca gtcattttcc gacacgggga gaggggtgaa gatactgagt c
 471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5				10					15		
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
			35					40					45		
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
			50			55				60					
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65				70					75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
			85					90					95		
Val	Lys	Ile	Leu	Ser											
			100												

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnnagatgcg ggggaccttc atggactctc togtgctccg tagctcacac tcaccgcagc
 60
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
 120
 accgcagctc acactcacgc caaggcagct cactctcacc gcacggcagc tcacactcac
 180
 cacacagcag ctactcttta ccggacgggg aacctaaact taccggacgg gaagcctcac
 240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg caccgcagct
 300
 cactctcacc gcacgcgagc tcactctcac cggacgggag ctactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctccca caactaatgg tggccatcgg caatgcgagc
 60
 ataaaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg
 120
 gaagcgccta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggaagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1           5           10           15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20           25           30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35           40           45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50           55           60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65           70           75           80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85           90           95

```

<210> 1445

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1445

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naccgggttca cgggggaggc cttcgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggt ctccaagcgg accactactt ggttctttcg agccggtcca
180
gagggtttatg agctggccnt cccccgagga gtcgtgttcg ccatgcaaaag cgctcgtttg
240
aggggtggacc cgcacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

```

<210> 1446

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1446

```

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
1           5           10           15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20           25           30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35           40           45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50           55           60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65           70           75           80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85           90           95
Arg Leu

```

<210> 1447

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1447
 nnnacagaacc agaagatcaa cctgcatgac ggctcgttct cgcacgttgg cggcatgggtg
 60
 ggtaatatct ccattgccca ggggtgcacg atcgagaacg ccgtcggcgg ttccgggaac
 120
 gacctgtctga tcggcaacga tgcggccaac gaactgcgcg gcggtgcggg caacgatate
 180
 ctctacgggg ctggcggtgc cgaccagggt tgggttggtt cgggcaacaa taccttcgtg
 240
 ttccgcgcgg ttctcgcactc ggcgcgcgaaa gcggccgacc ggatcatgga cttcaccagt
 300
 ggccaggaca agatcgatct gtcggggate acccatggtt cgggcctgac cttcgtcaac
 360
 gcg
 363

<210> 1448
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1448
 Xaa Gln Asn Gln Lys Ile Asn Leu His Asp Gly Ser Phe Ser Asp Val
 1 5 10 15
 Gly Gly Met Val Gly Asn Ile Ser Ile Ala Gln Gly Val Thr Ile Glu
 20 25 30
 Asn Ala Val Gly Gly Ser Gly Asn Asp Leu Leu Ile Gly Asn Asp Ala
 35 40 45
 Ala Asn Glu Leu Arg Gly Gly Ala Gly Asn Asp Ile Leu Tyr Gly Ala
 50 55 60
 Gly Gly Ala Asp Gln Val Trp Val Gly Ser Gly Asn Asn Thr Phe Val
 65 70 75 80
 Phe Ala Ala Val Ser Asp Ser Ala Pro Lys Ala Ala Asp Arg Ile Met
 85 90 95
 Asp Phe Thr Ser Gly Gln Asp Lys Ile Asp Leu Ser Gly Ile Thr His
 100 105 110
 Gly Ser Gly Leu Thr Phe Val Asn Ala
 115 120

<210> 1449
 <211> 541
 <212> DNA
 <213> Homo sapiens

<400> 1449
 aggcgtacc agattatggg ctgccccgacc tcaatgacat gcgcttgagc ctgcatgaat
 60
 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgac cctcgggttg
 120
 ggaagttagc tgtcaggagg agggagggtg cctacaaccc ttgggtactg gcgthtggta
 180
 ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtg acgtgcacg cttggggcgc gttttctga acgcaatccc gccctggcac
 360
 cttttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtcttttggc
 420
 ttctccccc ggcgcctgcg ccagaagcct gctgacgagc ttctgaggtt gaccattcca
 480
 ttgatgcact tgggtgtggcc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1450
 Met Arg Leu Ser Leu His Glu Ser Leu Ser Gln Ser Arg Leu Ala Ile
 1 5 10 15
 Glu Arg Phe Ile Gln Ala Tyr Glu Pro Arg Leu Gly Asn Val Arg Val
 20 25 30
 Arg Arg Arg Glu Gly Ala Tyr Asn Pro Leu Val Leu Ala Phe Val Ile
 35 40 45
 Glu Ala Thr Val Val Ile Asp Gly Val Ile Gln Pro Val Val Phe Asn
 50 55 60
 Ala His Leu Val Gly Gly Gly Thr Gly Arg Val Cys Tyr Leu Met Phe
 65 70 75 80
 Phe Glu Leu Phe Tyr Gln Ser Glu Leu Ser Ala Leu Arg Thr Leu Gly
 85 90 95
 Arg Arg Phe Ser Glu Arg Asn Pro Ala Leu Ala Pro Phe Leu Ala Asp
 100 105 110
 Ser Arg Pro Gly Pro Gly Arg Arg Gly Ser Ile Glu Ser Leu Cys Leu
 115 120 125
 Ser Pro Arg Ala Pro Ala Pro Glu Ala Cys
 130 135

<210> 1451
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 1451
 aggcctctgg cgagttgatc tacagcttcg gacccggctg tatggctact ggcgtcaagt
 60
 acacgaacac agtttgcact cctgtgggag actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaacccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacgggtgc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1452
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
1 5 10 15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
20 25 30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
35 40 45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
50 55 60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65 70 75 80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
85 90 95

<210> 1453
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1453
cgcccgcgcg gccccacgtg caccgcgtgc atgggtccctc gaggacgcgc atctgcagcc
60
cccgctcccc gcaaacctcc aggcgggaga gctccggcca aggcgcgtgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactgcct atagaaatgt gcaaacacc cgtgcgcaca ggcccccca cccatgcagg
300
cgtgtgcaca tcaccacac ggacac
326

<210> 1454
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1454
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
1 5 10 15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
20 25 30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
35 40 45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

```

      50              55              60
Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
65              70              75              80
Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
      85              90              95
Thr Asp

```

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<210> 1455
<211> 314
<212> DNA
<213> Homo sapiens

```

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<400> 1455
gatccagtc aaaaagcatg tgggggttgct cacgctgggt ggaaagggtac tttgttgggt
60
gttgctatgg ctacagtga tgetatgata gcagaatatg gctgccgttt ggaaaaaactt
120
tgggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
180
gaggcatttc ataattctca tctgcatgt gtacaactat ttgattcacc aaatccctgt
240
atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg ctctctgcct
300
ccttccaaac tgac
314

```

```

<210> 1456
<211> 104
<212> PRT
<213> Homo sapiens

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<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
1      5      10      15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
      20      25      30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
      35      40      45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
      50      55      60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65      70      75      80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
      85      90      95
Cys Phe Leu Pro Pro Ser Lys Leu
100

```

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<210> 1457
<211> 437
<212> DNA
<213> Homo sapiens

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<400> 1457

```

nattccaccag aatccccaga atcccccaaa tactacattg cactttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgccacaga accttctctg ccectctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacacct cccaggaaa
 180
 aggtcccccgt gcgccaaagt aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtgggggaca caggaagtcc acgcttgac ggaggggacg ggacaccta ccgtgactgc
 300
 cagagcccat ttggggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcactgggct gcctaccac tgcccaagtg cctcaagtca
 420
 acacattcct gcactgn
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5					10				15		
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
		20						25				30			
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
		35				40					45				
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55					60				
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
	65				70				75					80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Ala	Tyr	Pro	Leu	Pro	Lys
			85					90					95		
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
			100					105							

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagaggtca ccggccacga gattcccgcg gaggtcgcgc ccgcgcgcgc gggcgaccgc
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggtggaa cccgacgcgc
 120
 acggatctgc gccgcacgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacctctg gtaaggcgac gcagttatcc tcgatctcct ccagagcag gcggcagccc
 240
 gccactgcgg tgcgcagcat gccctccac tccccgatcg ccatgagctg gcgan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
 nnaagctttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
 60
 gttgaagcac agtcaattgc ggggttctaaa tgcgaacacg cctgggcctt acaacgttca
 120
 gaaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcatt atcccgtgaa
 180
 gaagcacaaa ttcgcggtga agcgcttaac ctaacgcctt atgatgcgat gcttgataag
 240
 tttgaaccag gcacgacaaac ggtttcgctc aatactttgt tttcaaagg aaagacgtgg
 300
 ttacctacgt taattgaaaa agcgtttagaa aagcagcaat cagaatctat cattatgccca
 360
 tcaggcacct tttccacggc gaatcaaaaa gccttggat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

```

65              70              75              80
Phe Glu Pro Gly Thr Thr Thr Val Ser Leu Asn Thr Leu Phe Ser Lys
              85              90              95
Val Lys Thr Trp Leu Pro Thr Leu Ile Glu Lys Ala Leu Glu Lys Gln
              100              105              110
Gln Ser Glu Ser Ile Ile Met Pro Ser Gly Thr Phe Ser Thr Ala Asn
              115              120              125
Gln Lys Ala Leu Gly Leu Glu Ile Met Lys Leu Leu Lys Phe Asp Phe
              130              135              140

<210> 1463
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1463
nagcgcttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaagtca tgggccgtgg cgacgtaccg gcaccgttgc aaaccgaatg cccgttctac
120
gcgtgtctgg aattcgaagc caccaccgaa gaagtcgcca accacgacct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgctga tgagccagag cgaaccacaa
240
ctgcacaacc tgtggaact gcgcgagtac atctcgga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccc cgttcttgaa ggaattgac
360
gcgatcgtcg tgagcattac cggacttcg aaattgttg tggccacat cggcgacgca
420
a
421

<210> 1464
<211> 140
<212> PRT
<213> Homo sapiens

<400> 1464
Xaa Ala Phe Gln Ser Lys Leu Asp Leu Thr Ala Phe Glu Phe Phe Ser
1              5              10              15
Asp Lys Ala Leu Ala Lys Val Met Gly Arg Gly Asp Val Pro Ala Pro
20              25              30
Phe Glu Thr Glu Cys Pro Phe Tyr Ala Leu Leu Glu Phe Glu Ala Thr
35              40              45
Thr Glu Glu Val Ala Asn His Ala Leu Glu Thr Phe Glu His Cys Val
50              55              60
Glu Gln Gly Trp Val Leu Asp Gly Val Met Ser Gln Ser Glu Thr Gln
65              70              75              80
Leu His Asn Leu Trp Lys Leu Arg Glu Tyr Ile Ser Glu Thr Ile Ser
85              90              95
His Trp Thr Pro Tyr Lys Asn Asp Ile Ser Val Thr Val Ser Lys Val
100              105              110
Pro Ala Phe Leu Lys Glu Ile Asp Ala Ile Val Val Ser Ile Thr Arg

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115              120              125
Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala
130              135              140

<210> 1465
<211> 424
<212> DNA
<213> Homo sapiens

<400> 1465
gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggt agatggcatg
60
cagcctctcg ggcgggaaag tggctctacag tgccctgcttg cccgggcagg cagctcgtag
120
gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca
180
caacctcacc gaattcaaac tccggtggat tccccacgcc gagcagtgga aggcggaaaaa
240
ccgtcctgca acagagtcta aagcccgcta gacggactgc tcagtacatg gggatctctg
300
gaccttggcc acggaagttt tcggtcaagc acccgaattc gacttcccat atatgaaact
360
cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
420
cacg
424

<210> 1466
<211> 124
<212> PRT
<213> Homo sapiens

<400> 1466
Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
1      5      10      15
Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
20     25     30
Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
35     40     45
Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
50     55     60
Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
65     70     75     80
Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
85     90     95
Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
100    105    110
Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
115    120

<210> 1467
<211> 441
<212> DNA
<213> Homo sapiens

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<400> 1467
 nacgctgac ggcgaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgcctgtca tcatggctca agtgcgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtagctatg cgccctgtgt gatggtcatg acaacgtgga atgccacgat cctagcccg
 240
 gccaaactcg tgcatgagaa ccgcataac tgcctgcgcc tcgtgtgtgg cgactcgtac
 300
 cctcttgtgc cgccctgagat ttggttccag acgcgcacat acttgccgtg cgtcgatgcc
 360
 cacacgggcc cgcctcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10				15		
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
		20						25				30			
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
		35					40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
		50				55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65			70						75					80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
			85						90				95		
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
			100					105					110		
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Met						
		115						120							

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nnctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttaac atcttttagc gatttttagt ccaattgtca ccnctggatt attgatttgc
 120
 ttggcattag cgtgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagtgggtc catttgggcg tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttggtgt cgtaatcgca
 360
 ggttcatatta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgta caggaatcgt cgttctgttg attgggtctac cattaatg
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa Leu Asp Leu Val Tyr Gly Leu Asn Asp Arg Pro Asn Pro Phe Ile
 1 5 10 15
 Ala Phe Leu Ala Ala Leu Gln His Leu Leu Ala Ile Leu Val Pro Ile
 20 25 30
 Val Thr Xaa Gly Leu Leu Ile Cys Leu Ala Leu Gly Val Ser Arg Glu
 35 40 45
 Asp Thr Asn Met Ile Leu Ser Met Ser Leu Ile Ile Ser Gly Ile Ala
 50 55 60
 Thr Phe Leu Gln Cys Lys Lys Val Gly Pro Phe Gly Ala Gly Leu Leu
 65 70 75 80
 Ile Val Gln Gly Thr Ser Phe Asn Phe Ile Gly Pro Ile Ile Gly Ile
 85 90 95
 Gly Ser Ser Met Val Ala Ala Gly Thr Pro Val Glu Gln Val Met Ala
 100 105 110
 Ala Ile Phe Gly Val Val Ile Ala Gly Ser Phe Ile Glu Met Gly Val
 115 120 125
 Ser Gln Ile Leu Pro Trp Val Lys Lys Leu Ile Thr Pro Leu Val Thr
 130 135 140
 Gly Ile Val Val Leu Leu Ile Gly Leu Pro Leu Met
 145 150 155

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttget gtggctcggc
 60
 gttatcgatc agccgctgac gattttgac accaatctgg cggtgtatat cggcattgtg
 120
 tacgcttate tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctggtgg aggcctcact ggatctcggt gcccgccgc tgaaaaagtt tttaaatgtg
 240
 attgtccccc tcaccaaagg cggcattatc gcgggggtcga tgctggtgtt tatccggcgg
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcggcggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tgttgttaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg ttagagagcy ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgtcctcagc ttctcttgaa aatgtctctt
240
tatgcaaacg ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttccacca
300
gtccacatt ttataagca atttggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

```

                20                25                30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
                35                40                45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
                50                55                60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
                65                70                75                80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
                85                90                95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
                100                105                110
Arg

```

<210> 1475

<211> 389

<212> DNA

<213> Homo sapiens

<400> 1475

```

accggcgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcacc
60
gacatcgata agctcatcgc ttaagacgcg gccacgctcg ggccagcatt gctcaaaaag
120
ctggctgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtcacggctc attatcaaag accgcattga agtcgctttg cggcgggcga ccggcgggca
240
tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctattttttc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtatatt tcccccgct atggggaggg
360
ggataaccgg agcttgacgg ggtgggtgtc
389

```

<210> 1476

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1476

```

Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
1                5                10                15
Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
                20                25                30
Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
                35                40                45
Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
                50                55                60
Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
                65                70                75                80
Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
                85                90                95
Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

```

100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120

<210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1477
 tacagcgaga atctgcacga taccacattc ctcaaaacct attgcgttgg cttcgagcaa
 60
 ttcctccctt atttgcctgg ccaaacggac ggccaacctt aagatgcccc atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaatcatc cgggcactgg ccgccaat ggcgccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatggcgg
 240
 tggatgacgg tagtgctggc ggcgatgctt ggccaatcg gcttaccggg cggcggttc
 300
 ggttttgggt ggccctccaa cggcgaggt acccccgagc cgaaggggt gatcctgagc
 360
 ggtttctccg gttcccccgc tacgcccga cggcatgcca agggggattt caaaggttac
 420
 agcagtagca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

```

445                               150                               160
Asp Trp Asn Gly Lys Arg
                               165

<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1479
acgcgtgtgagg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggccacac
60
ttaagtatgt tctttacatt gaaacagaaa ggaagaaga taggaaaaat ggtgccagca
120
cgctgggctt tttttgtttg ctgttttggg tggggtgtgc tagtgcagtg tccgggtgtac
180
gcttttgtcc tcaaacaggc ttgttccccc gtcagagttt cattattgtt gctggtaaac
240
aaatgccaaag ttgacaaaaa aacagtgaaa taagacaaaa gattttgaaa aatgcttcac
300
catgtcagaa ggaagaagcc cttttcacgg gtgcctgccc acatttcctt gccccagcctg
360
agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaaa tatatacggc
420
t
421

<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1480
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
1 5 10 15
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
20 25 30
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser
35 40 45
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
50 55 60
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
65 70 75 80
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
85 90 95
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
100 105 110
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
115 120 125
Glu Asn Tyr Ile Arg
130

<210> 1481
<211> 545

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<212> DNA

<213> Homo sapiens

<400> 1481

gtcgggtgcg cgcccagtct cgtgccgaca tgcagttcct ggcccgaggag gtcgcatcca
 60
 tccggatgca gatgggcgag ttggccacgc gcgattattt gcgctcggag ctacgcgacg
 120
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgaccgggt
 180
 tcgcgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc
 240
 gagaacccag tggtaaggc cattgccgat gcgttgtcgc acgtcaatga ccccgagatc
 300
 aaacgcccc aattccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
 360
 gcttttcgtc gcattcctgt gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
 420
 caggccaccg aggctgtgcg cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
 480
 accatgaccg acgaacacgc cgatgctctc aaagttcagc tcgcgcggtga cgtccccgaa
 540
 cgcg
 545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met Ser Thr Glu Asn Pro Val Val Lys Ala Ile Ala Asp Ala Leu Ser
 1 5 10 15
 His Val Asn Asp Pro Glu Ile Lys Arg Pro Ile Thr Asp Leu Asn Met
 20 25 30
 Ile Asp Glu Ile Thr Val Asp Glu Gln Gly Arg Ala Phe Val Arg Ile
 35 40 45
 Leu Leu Thr Val Ala Gly Cys Pro Leu Lys Thr Glu Leu Arg Glu Gln
 50 55 60
 Ala Thr Glu Ala Val Arg Ser Val Asp Gly Val Thr Ser Val Ser Val
 65 70 75 80
 Glu Leu Gly Thr Met Thr Asp Glu Gln Arg Asp Ala Leu Lys Val Gln
 85 90 95
 Leu Arg Gly Asp Val Pro Glu Arg
 100

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

gtacggcttc gagagggcta cagtgtccga gaggtcacac tggccaaagg aggggtccaa
 60

ttggaggtaa agctggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg
 120
 gcatcctggc cccctggagcc tgagggccct cgagtaaac gggtggaagt gacgatggaa
 180
 ggcggtacg acatttttgca tgatgtgtcc tgtgactaa ggcagcccat tcgttcattg
 240
 tatcgtaccc atgttatccg gcgtttctgg aacacgtgc agagcatcaa ccagacagac
 300
 cagatgcttg cccaccttca gtcctttctc tcagtgcctg agcatttcac gcttcctgac
 360
 agcaccaaga gcggagtgc actcttctac atccctccag gctccaccac cccggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgccta ctggaagccc
 480
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcctgggtct
 540
 aatcctggag catgacacac caatccccaa gcacttgcac accccgggca gcaatgggag
 600
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 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5					10					15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55				60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85						90				95		
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100				105					110			
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130					135					140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145				150					155					160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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 60
 ctgttctctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgaatattttt
 120
 gttggcgata ttacttctga atcacgtctc aaaatgtggc ataccagaac tttattgaat
 180
 gcctacagca atctgaaaga tgatgccaag tccaattggg tatggtggga ccttcctatg
 240
 ccagcccaga gaaaatctgc ttctgcgat ttgattgaag aaaatcctag cagcggttaag
 300
 tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
 360
 aaggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
 420
 tataaaagaa ctgcaccga tagctttgga gttaaagcgc agcgtgctga agtgcggttt
 480
 gatgatgttg ccggtgtgtc tcgcaccctc ggaggggggt caagtgcgca agtcataatg
 540
 gtctgtgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
 600
 atggggttac ccgacgaata catattgcca aaaaattata atgaggcgta tcacttaacg
 660
 ggtgatggtg ttgtagtgcg ggtgttatcc cacatagcca ctcatatttt tgaccagtg
 720
 atggagcgtg tgtttgagga tgcggcgga ctgcttaagc aaatcgcata gcacgttttt
 780
 ggcaggaaga tatgagcgtt attcgtgtga aaaggacct tcagctaaaa aaattgattg
 840
 aatcctatgc agaagccttg aaagttagg ccataaagct aggagagcat ggattaactg
 900
 aagctgaatt ttatgatagc ggcctcttcc ggggggctat cgagcgaatt cgaggacagt
 960
 tctcccgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg
 1020
 ataacgacta cattgctgat tgggagtcgg ctgggtgaac gaatcgccat gattatatgg
 1080
 taactctcaa ttctgggcgc aaagctgcta ttgagctgaa aggggtgcct gatggcaata
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 1200
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 1260
 ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggctgtg
 1320
 gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
 1380
 ggcggttcaa attgcccga ccatgtttgt atcttttacc ttcgacgatt ccaagccaa
 1440
 gaaacaaccc gtctccaaga gctcagcaga ttgaagcgt gcagctaate aaagcgtttc
 1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatc
 1560
 atggtaaaga tacogtccgt aaaacgacta tcattcgaaa cggcatggtg gagcgtaaat
 1620
 cggaatgac ggcaataagg cggctctaat ttgtgcatgc ctatgctgca tgaatccgca
 1680
 tgatcgtttg aggtacgttt ttgctgaggc ccgccagttc tgggtgggctt ttgcttatgt
 1740
 catgcacctg catgaaaacc gctacataaa cggggcaggc gtggcgggga tacgagcgcg
 1800
 cgcaacgggg tgaatgggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc
 1860
 gggtaggggtg agtgagaggc agcaataaag aagcgccccg cagaatgctg ctggggcgct
 1920
 gtgagaggtg gtcttgttgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc
 2040
 gcagtcgctt ctgcaggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
1				5					10				15		
Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
		20						25				30			
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35					40					45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
		50			55					60					
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65				70					75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85						90					95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
			100					105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
			115					120				125			
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
			130					135				140			
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145				150					155						160
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
				165					170					175	
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
			180					185						190	
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
			195					200				205			
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Lys Gln Ile Ala		240
245	250	255

<210> 1487
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 1487
 acgcgtgagg ggaggggatg ctgggcagat cttgtgaggg aaaattcagg aaggacctct
 60
 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
 120
 catcaggga tgctggggaa aaaaagcact ccaggccag ggatcagcaa agcacaggat
 180
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
 240
 ttcttggggg ggtgaggtca ggcagggagg tgggtgagag gtcattgggg cgcaggcaaa
 300
 cggccctccc tccagtgcc ccacatgcag gcctggagc accaggagcg gggaggctcc
 360
 gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagcccttcc tcttggggac
 420
 tggggagagg cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
 480
 cacaggcgct ctacaggacc cagatcctga tctgtcaga tctgcagcgc cgtgggaggg
 540
 tgctggcgcc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtggtcag
 600
 gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
 660
 cccctacat tcttggggca cccactgtag gccaggccct gtgccggatc tgatgataca
 720
 gtgatgacta agtcacagtc cctgcctctg agggccccc atgtgtccgg gacagccaag
 780
 caaccacaat tgttaaaatc cagtgtcagg acccnaggag aag
 823

<210> 1488
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1488
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu
 1 5 10 15
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu
 20 25 30
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg
 35 40 45
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

```

      50              55              60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65              70              75              80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85              90              95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100              105              110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115              120              125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130              135              140
Ala Leu Gly Arg Ala
145

<210> 1489
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1489
nnccagttcca ccgtcaagct gcccgcggcc gccgaacaca atgtgcgcaa tcgcgtggcc
60
gcgattgcct gcgccgtggg tgccggcacc aaccaggacg ccatcgtgcg cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcgccgc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtaccgc gcgcgcgcac cctgggtggtg gccgacatgg gcgaagtcgg cgcacaggga
300
aaagaatttc acgaagaaat cggggccttac gcacacacgc gt
342

<210> 1490
<211> 114
<212> PRT
<213> Homo sapiens

<400> 1490
Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1              5              10              15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20              25              30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35              40              45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50              55              60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65              70              75              80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85              90              95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100              105              110
Thr Arg

```

<210> 1491

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1491

```

ncctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtaccctggac
60
atgggggtag attaccttctc tteccagctc gactgggctg gatatcagggt gtccaccaca
120
tgggggtcag gtcccactcc caaaggagta gccatcacc acgagtcggc ggtcaataacg
180
attgtcgatg tcaacgaacg cctcgggggtg actccgacgc accggatatt ggggatttca
240
gagctaaact tcgatctatc ggtatacgc acctctcgga tgttcgcgcg ggggtgctacc
300
ttggtgttgc catctccagc agacaaacgt gat
333

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<210> 1492

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1492

```

Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
1          5          10          15
Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
20          25          30
Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
35          40          45
Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
50          55          60
Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
65          70          75          80
Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
85          90

```

<210> 1493

<211> 1316

<212> DNA

<213> Homo sapiens

<400> 1493

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nggtaccagg gcaaaagaagg ctgggcccccc gcctcctacc taaagaagaa cagtggggag
60
cccttcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttggat
120
ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
180
gacgggcggt ttgaaggcgc ccoggtgccc gacggtgacg ccaagcagag atccacaaag
240

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atgaggcaga gacccccctcc tcgccgggac atgaccattc ctcgaggcct caacctgccg
 300
 aagccgccca tcccgcccca agtggaggaa gagtattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag ctctccaggca ggcttgaagg tcgagggtgat cgagaaaaac
 420
 ttgagtggtt ggttggtacat tcagattgaa gataaggaag ggtggggcccc ggccaccttc
 480
 attgacaagt acaagaagac gagcaacgag tcgagaccga actttctggc tccccgtccc
 540
 cagcaggatga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
 600
 gaagccacgg gccctccccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg
 660
 ttgccatggt ctaaaagactg gaagggcagat aaggatgtcc tgaggaaggc atcttcagac
 720
 atgtctcgct cagcaggcta cgaggagatc tcagaccccc acatggagga gaagcccagc
 780
 ctccctccgc ggaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
 840
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgatattg
 900
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa
 960
 cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
 1020
 gtcttgacca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
 1080
 ctgccagagg agaagccaga tgccactccc cagaatccct tctgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc tcccccaaa acggagccac ctcaggggca agaccaagt
 1200
 gacatctgca acctcaggag taagctcagg cctgccaagt cccaagacaa gtccttgttg
 1260
 gatggggagg gcccccaggc agtagggggc caagacgtgg ccttcagccg aagctt
 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa Tyr Gln Gly Lys Glu Gly Trp Ala Pro Ala Ser Tyr Leu Lys Lys
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 Asn Ser Gly Glu Pro Leu Pro Pro Lys Pro Gly Ser Pro Ser
 20 25 30
 His Pro Gly Ala Leu Asp Leu Asp Gly Val Ser Arg Gln Gln Asn Ala
 35 40 45
 Val Gly Arg Glu Lys Glu Leu Ser Ser Gln Arg Asp Gly Arg Phe
 50 55 60
 Glu Gly Arg Pro Val Pro Asp Gly Asp Ala Lys Gln Arg Ser Pro Lys
 65 70 75 80
 Met Arg Gln Arg Pro Pro Pro Arg Arg Asp Met Thr Ile Pro Arg Gly

	85		90		95
Leu Asn Leu Pro	Lys Pro Pro Ile Pro	Pro Gln Val Glu Glu Tyr			
	100	105	110		
Tyr Thr Ile Ala Glu Phe	Gln Thr Thr Ile Pro Asp Gly Ile Ser Phe				
	115	120	125		
Gln Ala Gly Leu Lys Val Glu Val Ile Glu Lys Asn Leu Ser Gly Trp					
	130	135	140		
Trp Tyr Ile Gln Ile Glu Asp Lys Glu Gly Trp Ala Pro Ala Thr Phe					
	145	150	155		160
Ile Asp Lys Tyr Lys Lys Thr Ser Asn Ala Ser Arg Pro Asn Phe Leu					
	165	170	175		
Ala Pro Leu Pro His Glu Val Thr Gln Leu Arg Leu Gly Glu Ala Ala					
	180	185	190		
Ala Leu Glu Asn Asn Thr Gly Ser Glu Ala Thr Gly Pro Ser Arg Pro					
	195	200	205		
Leu Pro Asp Ala Pro His Gly Val Met Asp Ser Gly Leu Pro Trp Ser					
	210	215	220		
Lys Asp Trp Lys Gly Ser Lys Asp Val Leu Arg Lys Ala Ser Ser Asp					
	225	230	235		240
Met Ser Ala Ser Ala Gly Tyr Glu Glu Ile Ser Asp Pro Asp Met Glu					
	245	250	255		
Glu Lys Pro Ser Leu Pro Pro Arg Lys Glu Ser Ile Ile Lys Ser Glu					
	260	265	270		
Gly Glu Leu Leu Glu Arg Glu Arg Glu Arg Gln Arg Thr Glu Gln Leu					
	275	280	285		
Arg Gly Pro Thr Pro Lys Pro Pro Gly Val Ile Leu Pro Met Met Pro					
	290	295	300		
Ala Lys His Ile Pro Pro Ala Arg Asp Ser Arg Arg Pro Glu Pro Lys					
	305	310	315		320
Pro Asp Lys Ser Arg Leu Phe Gln Leu Lys Asn Asp Met Gly Leu Glu					
	325	330	335		
Cys Gly His Lys Val Leu Ala Lys Glu Val Lys Lys Pro Asn Leu Arg					
	340	345	350		
Pro Ile Ser Lys Ser Lys Thr Asp Leu Pro Glu Glu Lys Pro Asp Ala					
	355	360	365		
Thr Pro Gln Asn Pro Phe Leu Lys Ser Arg Pro Gln Val Arg Pro Lys					
	370	375	380		
Pro Ala Pro Ser Pro Lys Thr Glu Pro Pro Gln Gly Glu Asp Gln Val					
	385	390	395		400
Asp Ile Cys Asn Leu Arg Ser Lys Leu Arg Pro Ala Lys Ser Gln Asp					
	405	410	415		
Lys Ser Leu Leu Asp Gly Glu Gly Pro Gln Ala Val Gly Gly Gln Asp					
	420	425	430		
Val Ala Phe Ser Arg Ser					
	435				

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

agatctctgt cccgtagagg tgccacctca tctccatga gagctgtgct ttgctttctt
60

ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtcggga
 120
 gagggcaggc cgcggacatg gggcatgtgg cgatgtgttt caccacccac tcccgctga
 180
 agtgccactg tgagcccaac ccacgggtgcc aggetggggt gcactccagg ctctgcagc
 240
 agaccacact cctcagcctc ctccccctga aggcctgggca tggcctggac aaagggtgtc
 300
 ctctctgtgt gtgccatgct gacgtggca
 329

<210> 1496
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1496
 Met Ala Gln Gln Arg Arg Thr Pro Phe Val Gln Ala Met Pro Ser Leu
 1 5 10 15
 Gln Gly Lys Glu Ala Glu Glu Val Gly Leu Leu Gln Glu Pro Gly Val
 20 25 30
 Gln Pro Ser Leu Ala Pro Trp Val Gly Leu Thr Val Ala Leu Gln Ala
 35 40 45
 Gly Val Gly Gly Glu Thr His Arg His Met Pro His Val Arg Gly Leu
 50 55 60
 Pro Ser Pro Gly Leu Pro Ala Cys Arg Ser Ala Val Met Gly Ala Ile
 65 70 75 80
 Leu Leu Ala Ala Ser Arg Arg Lys Gln Ser Thr Ala Leu Met Glu Asp
 85 90 95
 Glu Val Ala Pro Leu Arg Asp Arg Asp
 100 105

<210> 1497
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 1497
 naactctctg cactcactca ggcgacagggt tggcggcoga cttggaagcc gctgcagcac
 60
 ttgacgcggg gcgatctcga agcgttcgggt cttggcctga cggtcgatgg ctgcccgtgtg
 120
 ccgttgatcg cgcaaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
 180
 cgcaactcag gccagatgaa tctgttttga aacgcaagga aggtaatat caggcaccca
 240
 caagaagcgg atccccgagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
 300
 gcagccttac gcgccgatg caagtcattc tttcgggcca cgcg
 345

<210> 1498
 <211> 104
 <212> PRT

<213> Homo sapiens

<400> 1498

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Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1             5             10             15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
 20             25             30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
 35             40             45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
 50             55             60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
 65             70             75             80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ser Lys
 85             90             95
Ser Ala Ala Asn Arg Ala Pro Glu
100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

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aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
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agtttccgtc tatcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctgcgccgt ttggttgcat tctttggctg
180
gatgcacaca cacaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatatatt atcgacccga aagtctgttt
360
aatctgggga ttcatccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1             5             10             15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
 20             25             30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
 35             40             45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
 50             55             60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
      85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
      100          105          110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
      115          120          125
Pro Ala Ser Thr Leu Ser
      130

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<210> 1501

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1501

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nnacgcgtgc atgetgcagg catcatccat cgcgatctga agcccaaaa catcttctcg
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gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacgggtgc cgtacatggc gccggagtgc ttccaggacg gctgcaccg gctggatgcg
240
cgcgcgggaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgaggggcg cccatcaagc
360
tt
362

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<210> 1502

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1502

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Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
1      5      10      15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Lys Arg Asp Phe Val Lys Ile
      20      25      30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
      35      40      45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
      50      55      60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65      70      75      80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
      85      90      95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
      100      105      110
Leu Arg Glu Gly Arg Pro Ser Ser
      115      120

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<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
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 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcga
 120
 ggggtcatga cgacccctec tgaacctgt tcaaaggcgg acggcttacc attcctcgct
 180
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaaacacc ccacgaggtc atcgatgcga tggcctcgtg gtggtgccag
 360
 attcacgggt accgaaaccc ggtcctcgac gaggccctca accgtcaaag ctcccagttc
 420
 agtcacgtca tggttggcgg actcaccat aaggcccggg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccggggcc cctcgaccgg atcttctcgg ctgattccgg gtctgtcggc
 540
 gtccgaggtg gtctcaaatt ggtcgtcag gtgcaaatcg ctcgaccccg agcgcgcggc
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
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 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

145 150 155 160
 Leu Thr Arg Thr Arg
 165

 <210> 1505
 <211> 556
 <212> DNA
 <213> Homo sapiens

 <400> 1505
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 120
 acggggggccc cgaactcgc tgacggcact aaaccttctt ccccgggcgc aaccaccttg
 180
 gcttcnngca tgacgaagct cagcggggga gctcagcggt tgtcagctaa cggcggcgaag
 240
 ctacccgacg gtgtctccca gctctccgga gggctcacaa ccttgcttca caagggccag
 300
 cagctcagcc aagggggccga tgggctggcc agcgggggtg cgacctacac cgatggcagc
 360
 gggaaggtcg tcgacggcat cgggcagctg tcggctggtt tgacgacgat ggatgagaag
 420
 atcgctcggg ctaccgggaa aatcgatccc tcccagctcg acaaaactcg cggtagggcc
 480
 ggacagcttg ctgatggcat cgaccagtto accggcaatc tggtagggta tcgtactgag
 540
 atccgccagt acgctg
 556

 <210> 1506
 <211> 169
 <212> PRT
 <213> Homo sapiens

 <400> 1506
 Met Ser Thr Leu Val Ser Ile Gly Leu Pro Asn Arg Trp Pro Gly Trp
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 Pro Ala Pro Arg Arg Asn Trp Thr Thr Gly Ala Pro Lys Leu Ala Asp
 20 25 30
 Gly Thr Lys Pro Ser Ser Pro Gly Ala Thr Thr Leu Ala Ser Xaa Met
 35 40 45
 Thr Lys Leu Ser Gly Gly Ala Gln Arg Leu Ser Ala Asn Gly Gly Lys
 50 55 60
 Leu Thr Asp Gly Val Ser Gln Leu Ser Gly Gly Leu Thr Thr Leu Ser
 65 70 75 80
 His Lys Gly Gln Gln Leu Ser Gln Gly Ala Asp Gly Leu Ala Ser Gly
 85 90 95
 Val Ala Thr Tyr Thr Asp Gly Thr Gly Lys Val Val Asp Gly Ile Gly
 100 105 110
 Gln Leu Ser Ala Gly Leu Thr Thr Met Asp Glu Lys Ile Ala Ala Ala
 115 120 125
 Thr Gly Lys Ile Asp Pro Ser Gln Leu Asp Lys Leu Ala Gly Gly Ala

130 135 140
 Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly
 145 150 155 160
 Tyr Arg Thr Glu Ile Arg Gln Tyr Ala
 165

<210> 1507
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 1507
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 120
 gtgagacttg ggtggggaca cagtgaaca tgaagtgtgc cagctgggt ggatgacgcc
 180
 ctctccccc cgccaccgag agctgcaggc cacatgattc cttttgggtg gcactcgggg
 240
 aagggcagaa tgtacaggaa cagagtgaga ttgcgagggc ctggggctga gggggggac
 300
 gcactagagg aaggcaaagg ggagcctect ggtgtgtggg agcactttct gtcttggttt
 360
 tgggtggtgc tgcacagtgg cccacaccgc tcagagctca cctgcctgca cccagccct
 420
 ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
 480
 cgcaccgta cctggggacc gggggtcctc ggtgatcatc ccgagctcca agacagaagc
 540
 tggactacag ccgtgctgag tggaggggtt tgggtgctgg gtgcccgcct cctattgtc
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 660
 cagcgt
 667

<210> 1508
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1508
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 1 5 10 15
 Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
 20 25 30
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
 35 40 45
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
 50 55 60
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
 65 70 75 80
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

```

      85              90              95
Ser Trp Thr Thr Ala Val Leu Ser Gly Gly Val Trp Trp Leu Gly Ala
      100              105              110
Arg Leu Leu Leu Leu Gln Thr Leu Gly Ser Arg Ala Pro Pro Val
      115              120              125
Gly Gln Cys Gly Leu Leu Gln Gly Thr His Ala
      130              135

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<210> 1509

<211> 463

<212> DNA

<213> Homo sapiens

<400> 1509

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120
aagggctagg aaccgagcac tgggcgttgg gcttactctc ctccatgggt gacctgggag
180
tggtgcccaa ggcgtctctc tcccagcacc tcagggtcct cactggtaaa ggaggggatg
240
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300
gatggcggtc accaagtaga agagggggccc tgggatagag agaagtctcc tctctgtctc
360
ctgatttccc aggcctctcc ctctctctgc cctccctcct ttcttccact tccccggatt
420
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463

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<210> 1510

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1510

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Met Val Thr Trp Glu Trp Cys Pro Arg Arg Ser Leu Pro Ser Thr Ser
1      5      10      15
Gly Ser Ser Leu Val Lys Glu Gly Val Ile Gly Met Ser Pro Lys Leu
20      25      30
Leu Gly Ser Gly Ile Leu Trp Leu Phe Thr Trp Thr Leu Asp Gly Gly
35      40      45
His Gln Val Glu Glu Gly Pro Trp Asp Arg Glu Lys Ser Pro Leu Leu
50      55      60
Leu Leu Ile Ser Gln Ala Ser Pro Ser Pro Gly Pro Pro Ser Phe Leu
65      70      75      80
Pro Leu Pro Arg Ile Pro Phe Glu Phe Gly Cys Asn Phe Asn Phe Xaa
85      90      95
Phe Arg Phe

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<210> 1511

<211> 633

<212> DNA

<213> Homo sapiens

<400> 1511

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 120
 ctggtaacgcg aggcctctcaa cgaccttgac catgacaagg tagtatccat tctatccccc
 180
 ctctggaagt tcttcatcgc agtggccaca cataccccac gttccgctat gagattctctg
 240
 tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctgcacacac tccggggaggc
 300
 gaggcctgag atggccagcg tcaaacccac taaggaccgg ggcgggtaca ccaatgatct
 360
 gtccgccgcg acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaaagt
 420
 cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctgcacgggt ccttaagctg
 480
 ccgtcgctaa ccattcctec caccctgcagc gcgcgctcgt ttttggggcc ctccccaagc
 540
 ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctgggtgga
 600
 aggccatcgc tccggtgctc ttcttcaacg cgt
 633

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
 1 5 10 15
 Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
 20 25 30
 Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
 35 40 45
 Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
 50 55 60
 Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
 65 70 75 80
 Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
 85 90 95
 Thr Pro Gly Gly Glu Ala
 100

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

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 ttggctcgtcc aatctcgtaa tgcccttctg aatgaactgc tgggcctgcc tcctgacacg
 120
 gctgtttctgc aggaaccgcc actcccgctc cttgcggatc tgactctcca ggctcgtctc
 180
 ttctgggcatc ttcatgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccg
 240
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag
 300
 tctgctctgg gcccttctgc aacatcttcc gtgtccgggg gaactgggtg gagtgagggg
 360
 tgtactgcgc ccagcgggg cctgtggtgc cgggcggccc g
 401

<210> 1514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Asp	Ala
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Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe	Cys
			20				25					30			
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
			35				40					45			
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
			50				55					60			
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
							70				75				80
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
							85				90				95
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala				
							100				105				

<210> 1515

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1515

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 120
 aactacgagc ctgacctgac cgacgatgcg acgtcggctc cgtcgcgctg cgtcattgac
 180
 gatccccggc ccctctagcc tattgcgcgc cgccaagaca tcagcgaate gggcatctat
 240
 gagacccatg tcaaagggct aaccgcctt caccctctcg ttctgagca tcttcgcagc
 300
 acctatgccc ggettgcceta tccggtgtgt atcgaaacac tcaagtcaat cggagtaaca
 360

gccatcgaac tactaccgt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc
 420
 ttatccgatt actgggggta caacaccctg gggttctttg cgcgcgatgc tgcctactgc
 480
 tccgtcggct cgatgggaac ccagggtcgc gagttcaagg acatgggtgac gtctttccac
 540
 gaagccggca tcgaggtttt cctcgatgtc gtctacaacc acactggtga gggcgcccat
 600
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 660
 gatcacgcga atgactatga cgtcaccggg tgtggcaatt ctgtcgacac cctccatccg
 720

<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

Xaa	Asp	Pro	Asp	Arg	Gly	Met	Arg	Phe	Asn	Pro	Ala	Lys	Leu	Leu	Leu
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Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
		20						25				30			
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35				40					45				
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50				55				60						
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65				70					75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
		85						90					95		
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100					105						110		
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
		115				120					125				
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130				135					140					
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145			150					155						160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
		165						170					175		
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180					185						190		
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
	195					200						205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn
	210				215					220					
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225				230						235					240

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1517
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 120
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 180
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 240
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 300
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 360
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cgggtggtggg cttctggcgg
 420
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 480
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 497

<210> 1518
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1518
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 Pro Pro Ser Pro Leu Lys Glu Thr Ser Phe Ser Ile Gly Leu Gln Val
 35 40 45
 Leu Phe Pro Phe Leu Leu Ala Gly Phe Gly Thr Val Ala Ala Gly Met
 50 55 60
 Val Leu Asp Ile Val Gln His Trp Glu Val Phe Gln Lys Val Thr Glu
 65 70 75 80
 Val Phe Ile Leu Val Pro Ala Leu Leu Gly Leu Lys Gly Asn Leu Glu
 85 90 95
 Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Ala Asn Ile Gly His Met
 100 105 110
 Asp Thr Pro Lys Glu Leu Trp Arg Met Ile Thr Gly Asn Met Ala Leu
 115 120 125
 Ile Gln Val Gln Ala Pro Val Val Gly Phe Leu Ala Ser Ile Ala Ala
 130 135 140
 Val Val Phe Gly Trp Ile Pro Asp Gly His Phe Ser Ile Pro His Ala
 145 150 155 160
 Phe Leu Leu Cys Gly
 165

<210> 1519
 <211> 2076
 <212> DNA
 <213> Homo sapiens

<400> 1519
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120
cttacaataa ttgaaggagt gctctctggt gatccacttg atctgaaaat gtttgaggct
180
attggatgga ttctggaaga agcaactgaa gaagaaacag cacttcataa tcgaattatg
240
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360
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420
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480
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540
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600
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660
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720
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780
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960
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1020
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1080
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1140
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1200
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1260
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1320
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1380
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1440
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1500
ttctcgttt tgctcagat tatcatctgc attggatttc aatctttggg ttttttttgg
1560

gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca
 1620
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 1680
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 1740
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 1800
 gttttttctg tgattttttt atatattttt atattattca tcattgttga tccagttgcc
 1860
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 1920
 atcattgttc ttgtcaatgc ctttgtgtct atcacagtgg agaacttctt ccttgacatg
 1980
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 2040
 cagccaccgc aggagtctgt ggatcggtgg ggaataa
 2076

<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

Xaa Asp Leu Trp Gly Ile Gln Arg Val Glu Asn Ala Arg Phe Leu Ser
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 Pro Glu Glu Asn Val Cys Asn Glu Met Leu Val Lys Ser Gln Phe Val
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 Ala Cys Met Ala Thr Cys His Ser Leu Thr Lys Ile Glu Gly Val Leu
 35 40 45
 Ser Gly Asp Pro Leu Asp Leu Lys Met Phe Glu Ala Ile Gly Trp Ile
 50 55 60
 Leu Glu Glu Ala Thr Glu Glu Glu Thr Ala Leu His Asn Arg Ile Met
 65 70 75 80
 Pro Thr Val Val Arg Pro Pro Lys Gln Leu Leu Pro Glu Ser Thr Pro
 85 90 95
 Ala Gly Asn Gln Glu Met Glu Leu Phe Glu Leu Pro Ala Thr Tyr Glu
 100 105 110
 Ile Gly Ile Val Arg Gln Phe Pro Phe Ser Ser Ala Leu Gln Arg Met
 115 120 125
 Ser Val Val Ala Arg Val Leu Gly Asp Arg Lys Met Asp Ala Tyr Met
 130 135 140
 Lys Gly Ala Pro Glu Ala Ile Ala Gly Leu Cys Lys Pro Glu Thr Val
 145 150 155 160
 Pro Val Asp Phe Gln Asn Val Leu Glu Asp Phe Thr Lys Gln Gly Phe
 165 170 175
 Arg Val Ile Ala Leu Ala His Arg Lys Leu Glu Ser Lys Leu Thr Trp
 180 185 190
 His Lys Val Gln Asn Ile Ser Arg Asp Ala Ile Glu Asn Asn Met Asp
 195 200 205
 Phe Met Gly Leu Ile Ile Met Gln Asn Lys Leu Lys Gln Glu Thr Pro
 210 215 220
 Ala Val Leu Glu Asp Leu His Lys Ala Asn Ile Arg Thr Val Met Val

225		230		235		240
Thr Gly Asp Ser Met	Leu Thr Ala Val Ser	Val Ala Arg Asp Cys Gly				
	245	250	255			
Met Ile Leu Pro Gln Asp	Lys Val Ile Ile Ala Glu Ala Leu Pro Pro					
	260	265	270			
Lys Asp Gly Lys Val Ala Lys Ile Asn Trp His Tyr Ala Asp Ser Leu						
	275	280	285			
Thr Gln Cys Ser His Pro Ser Ala Ile Asp Pro Glu Ala Ile Pro Val						
	290	295	300			
Lys Leu Val His Asp Ser Leu Glu Asp Leu Gln Met Thr Arg Tyr His						
	305	310	315			320
Phe Ala Met Asn Gly Lys Ser Phe Ser Val Ile Leu Glu His Phe Gln						
	325	330	335			
Asp Leu Val Pro Lys Leu Met Leu His Gly Thr Val Phe Ala Arg Met						
	340	345	350			
Ala Pro Asp Gln Lys Thr Gln Leu Ile Glu Ala Leu Gln Asn Val Asp						
	355	360	365			
Tyr Phe Val Gly Met Cys Gly Asp Gly Ala Asn Asp Cys Gly Ala Leu						
	370	375	380			
Lys Arg Ala His Gly Gly Ile Ser Leu Ser Glu Leu Glu Ala Ser Val						
	385	390	395			400
Ala Ser Pro Phe Thr Ser Lys Thr Pro Ser Ile Ser Cys Val Pro Asn						
	405	410	415			
Leu Ile Arg Glu Gly Arg Ala Ala Leu Ile Thr Ser Phe Cys Val Phe						
	420	425	430			
Lys Phe Met Ala Leu Tyr Ser Ile Ile Gln Tyr Phe Ser Val Thr Leu						
	435	440	445			
Leu Tyr Ser Ile Leu Ser Asn Leu Gly Asp Phe Gln Phe Leu Phe Ile						
	450	455	460			
Asp Leu Ala Ile Ile Leu Val Val Val Phe Thr Met Ser Leu Asn Pro						
	465	470	475			480
Ala Trp Lys Glu Leu Val Ala Gln Arg Pro Pro Ser Gly Leu Ile Ser						
	485	490	495			
Gly Ala Leu Leu Phe Ser Val Leu Ser Gln Ile Ile Ile Cys Ile Gly						
	500	505	510			
Phe Gln Ser Leu Gly Phe Phe Trp Val Lys Gln Gln Pro Trp Tyr Glu						
	515	520	525			
Val Trp His Pro Lys Ser Asp Ala Cys Asn Thr Thr Gly Ser Gly Phe						
	530	535	540			
Trp Asn Ser Ser His Val Asp Asn Glu Thr Glu Leu Asp Glu His Asn						
	545	550	555			560
Ile Gln Asn Tyr Glu Asn Thr Thr Val Phe Phe Ile Ser Ser Phe Gln						
	565	570	575			
Tyr Leu Ile Val Ala Ile Ala Phe Ser Lys Gly Lys Pro Phe Arg Gln						
	580	585	590			
Pro Cys Tyr Lys Asn Tyr Phe Phe Val Phe Ser Val Ile Phe Leu Tyr						
	595	600	605			
Ile Phe Ile Leu Phe Ile Met Leu Tyr Pro Val Ala Ser Val Asp Gln						
	610	615	620			
Val Leu Gln Ile Val Cys Val Pro Tyr Gln Trp Arg Val Thr Met Leu						
	625	630	635			640
Ile Ile Val Leu Val Asn Ala Phe Val Ser Ile Thr Val Glu Asn Phe						
	645	650	655			
Phe Leu Asp Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln						

```

        660              665              670
Gly Glu Tyr Arg Phe Ser Thr Thr Gln Pro Pro Gln Glu Ser Val Asp
        675              680              685
Arg Trp Gly Lys
        690

```

```

<210> 1521
<211> 373
<212> DNA
<213> Homo sapiens

```

```

<400> 1521
acgcgtcaca gctgaagccc gcagtgatag ccgacgcaca agccgaatca ataactgtg
60
ttctgacgcg ctgggccctca acgagtagtt cagcaaaagt aggcggaaca ggcgcaacga
120
gcgtaccatc cgatacacgc cagccttgac tgctgatata ccccgccac tgccgatcag
180
tgatttcaat ggcggttaca cagtctgsta tcggactgtc gatatcatcg taataggcga
240
tcacattccc atttgcacgc tatctgcga acttttgacc catgattatt atttccggaa
300
tgcaaaccaa taaacagtgt tggcgcttga tgaatagccg ttctgcacca cggcggtaga
360
gagtggcgtc gac
373

```

```

<210> 1522
<211> 94
<212> PRT
<213> Homo sapiens

```

```

<400> 1522
Met Gly Gln Lys Phe Ala Ala Tyr Asp Ala Asn Gly Asn Val Ile Ala
1      5      10      15
Tyr Tyr Asp Asp Ile Asp Ser Pro Ile Pro Asp Cys Val Thr Ala Ile
20      25      30
Glu Ile Thr Asp Ala Gln Trp Leu Gly Cys Ile Ser Ser Gln Gly Trp
35      40      45
Arg Val Ser Asp Gly Thr Leu Val Ala Pro Val Pro Pro Thr Phe Ala
50      55      60
Glu Leu Leu Val Glu Ala Gln Arg Val Gln Thr Gln Val Ile Asp Ser
65      70      75      80
Ala Cys Ala Ser Ala Ile Thr Ala Gly Phe Ser Cys Asp Ala
85      90

```

```

<210> 1523
<211> 525
<212> DNA
<213> Homo sapiens

```

```

<400> 1523
nnacgcgtgc ggtcaatatg ccgccattcc cataagcgct tggtggcatg tttccagggc
60

```

cagcatggca ccgatgccga gaggagacac aaaaaactgc ctctgacagc tcttgcctcaa
 120
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
 180
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttgttgag
 240
 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag
 300
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
 360
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta
 420
 aagggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttgcagca
 480
 gacatgtaca actttatggc caaagaaggg gagtatggca aattt
 525

<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

Xaa	Arg	Val	Arg	Ser	Ile	Cys	Arg	His	Ser	His	Lys	Arg	Leu	Val	Ala
1				5					10				15		
Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
		20						25					30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
		35					40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
		50				55				60					
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65				70					75					80	
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
			85					90						95	
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
			100				105					110			
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
		115				120					125				
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
		130				135					140				
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145				150					155					160	
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
			165					170						175	

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

gtgcacgagc gcatggatct catccgccaag agcgtggatg cgcgcattaa cgtggactac
 60

tggtccggcc tgctcgtgga ctatacctcg cagcacggcg tcgacgtttt ggtcaagggg
 120
 ctgcgttctt cctcggacta tgaatatgaa ctgccgatgg cccagatgaa ccggcgttta
 180
 tctggcatcg atacgggtctt ttgcttacc gatgaaaagt acggctacat cagctcatcg
 240
 ctgtgcaaac aggtcgcgca attcggcggt gaggtcaccg ggatgcttcg gatc
 294

<210> 1526
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1526
 Val His Glu Arg Met Asp Leu Ile Arg Gln Ser Val Asp Ala Arg Ile
 1 5 10 15
 Asn Val Asp Tyr Trp Ser Gly Leu Leu Val Asp Tyr Thr Ser Gln His
 20 25 30
 Gly Val Asp Val Leu Val Lys Gly Leu Arg Ser Ser Leu Asp Tyr Glu
 35 40 45
 Tyr Glu Leu Pro Met Ala Gln Met Asn Arg Arg Leu Ser Gly Ile Asp
 50 55 60
 Thr Val Phe Leu Leu Thr Asp Glu Lys Tyr Gly Tyr Ile Ser Ser Ser
 65 70 75 80
 Leu Cys Lys Gln Val Ala Gln Phe Gly Gly Glu Val Thr Gly Met Leu
 85 90 95
 Arg Ile

<210> 1527
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 1527
 tgtacaaaacc cgcctatgag caagtgcaaa ccaacatgga aatgctcaag gccggacgca
 60
 gcttcaagga atacgccgag atggcctgga agattccoga gcattacaaa aacaaccgct
 120
 acttcgcctt ggtgcacggg gttggcatga cggcgagta cccttgggtg gtgcaccgcg
 180
 aagacattga cgcgctgggt tacgacgggt tgttcgagcg cggcatgacc atctgtgtgg
 240
 aaagctacat cggccacgac gacggcgggc aaggcgtgaa gtcgaagaa cagatctaca
 300
 tccacgaaca cagcatcgag ttgctctccg attatccgtt cgacccacgc ctgttgccgc
 360
 gctgaacgcg t
 371

<210> 1528
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 1528

```

Met Glu Met Leu Lys Ala Gly Arg Ser Phe Lys Glu Tyr Ala Glu Met
 1             5             10             15
Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
 20             25             30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
 35             40             45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
 50             55             60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
 65             70             75             80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
 85             90             95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
100             105

```

<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

```

naccgctgggt gctcaccctc cgtgtgactc gcgctctgtc cggctcaggg ctcgcccctcc
 60
gtgggacttg cgctctgtcc ggctcagggc tcgcccctccg tgggacttgc gctctgtccg
120
gctcagggct cgcctccgt gggacttgcg ctctgtccgg ctcagggctc gccctccgtg
180
ggacttgccg tctgtccggc tcagggctcg ccctccgtgg gacttgccgt ctgtccgggt
240
cagggtccgc cctccgtggg acttgccgtc tgtccggctc agggctcgcc ctccgtggga
300
tttgcgctct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
360
gcggtccctt ccaccagcc cccatctccg gccggccatt tgtgaggccc tctgccactg
420
aggtgcactg ttccaattc ctcatccaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccatggctct caccactctg cgaggagcac agcctcttct ccacgtcca
540
atagcgtgtt cctcctttcc caggcctcac agaatgctct gtccgcatcc tccagcatt
600
ccattcacg
609

```

<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

```

Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

```

1	5	10	15
Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala	20	25	30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser	35	40	45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val	50	55	60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala	65	70	75
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu	80	85	90
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala	95	100	105
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu	110	115	120
			125

<210> 1531

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1531

accggtcgcc ggcttgtcga gggtaacctt ctggccacag ttggtgatgg tgataggtcc
 60
 agcgttggac tgggacgccg acgtgaaaa agaagctgac gagtecttgg gggcgccgcg
 120
 acattcggca agcatgagga cggggagcat cgagaccgag acagctcggc gaaggaattt
 180
 cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
 240
 caggcgctcg tcagggtgtc ttogggctcg acttcgtctc cgttccggcg accttcccg
 300
 tgcgcatggc caggtgggtc aagtcggggc ggatcagtc taccgctcgc ctcagctccg
 360
 gctttttacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggatttttagc
 420
 acccccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
 480
 tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
 540
 ggcateccct catacgcgag ccgcgatgat ggcgcccgag tgaggccctc cagttcgcgc
 600
 tgacgcatgc cgtctcgcgc agcctgccaa cgttttcccg caacctcacc acacgtttgc
 660
 cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctggct caccgcctcg
 720
 cgagag
 726

<210> 1532

<211> 178

<212> PRT

<213> Homo sapiens


```

<400> 1532
Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
1      5      10      15
Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
20     25     30
Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
35     40     45
Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
50     55     60
Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
65     70     75     80
Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
85     90     95
Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
100    105    110
Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
115    120    125
His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
130    135    140
Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
145    150    155    160
Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
165    170    175
Pro Glu

```

```

<210> 1533
<211> 364
<212> DNA
<213> Homo sapiens

```

```

<400> 1533
natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg
60
gagattattc acagcgaacg ggcgaccggc ggtgcgcgcc ttaacgtcct gctgacgctg
120
gttaaaatgc acgtcggtt gccgttgccg gcggtcggtc ttatcgccga agacacgcgt
180
ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc
240
accacgtttg cccccacgtc gatgtcgag gtgatgacg atccactgg gcagcgcacc
300
ttttccatt cgcctgccgc caatgcctg ctgcgtctcc ccgcctttga tcgactcgac
360
gcgt
364

```

```

<210> 1534
<211> 121
<212> PRT
<213> Homo sapiens

```

```

<400> 1534
Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

```

      1           5           10           15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20           25           30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35           40           45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50           55           60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
      65           70           75
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85           90           95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100          105          110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115          120

```

<210> 1535

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1535

```

gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaatccgc
60
caatccctctg ggcccgggt gcgtagccgc cagcggccag tectggccgc gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accgggccta tcgccgcggc ccatggctgc
180
aaaaaaaaactc ttcacagtct ggacattccc ttgtgtgtc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccgtt
360
actggccac
369

```

<210> 1536

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1536

```

Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
      1           5           10           15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
      20           25           30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
      35           40           45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
      50           55           60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
      65           70           75
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```

	85		90		95									
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe
	100								105					110

<210> 1537

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1537

ccactcgccg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt
60
ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgctgtgt
120
cctcacgcgc cccggggaga tgggtgggcca gctggcgtg ctcaccgagg agacctcgtc
180
ggcgtgtgtg agacactgac ccaccaggcc cggggcgacca cggtcgatgc cgttcgggac
240
tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
294

<210> 1538

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1538

Pro	Leu	Ala	Ala	Pro	Pro	Glu	Pro	Ser	Arg	Val	Ser	Gly	Arg	Gln	His
1				5					10					15	
Pro	Val	Arg	Val	Leu	Gly	Ala	Ala	Ala	Arg	Val	Pro	Ala	Glu	Asp	Arg
				20				25						30	
Gln	Pro	Gly	Gly	His	Leu	Leu	Val	Pro	His	Ala	Pro	Arg	Gly	Asp	Gly
				35				40					45		
Gly	Pro	Ala	Gly	Arg	Ala	His	Arg	Gly	Asp	Leu	Val	Gly	Val	Val	Glu
				50			55					60			
Thr	Leu	Thr	His	Gln	Ala	Arg	Ala	Thr	Thr	Val	His	Ala	Val	Arg	Asp
				65			70			75				80	
Ser	Glu	Leu	Ala	Lys	Leu	Pro	Ala	Gly	Ala	Leu	Thr	Ser	Ile	Lys	Arg
				85					90					95	

Arg Tyr

<210> 1539

<211> 1015

<212> DNA

<213> Homo sapiens

<400> 1539

acggttcgg gcgtcaggca cagcatctc aacagatgtg gctgacaccc aaggcagtcg
60
gcctcagtc cctgtcaccc acctagaacc tgttcacagc atgtcatccg ggctgctctg
120
gccttgactg gacatgatta ttatcctta cacacogtgg ctgctctaca ggccaagaaa
180

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctccaggccct
 240
 gaggcatcct ggcctcacc c taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggctgg gccatcttgc ccctgttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcagggtc aggccagtca agagggtggc tgagaagcag
 420
 gaggagcctc agagaccctc ccctcgaaag cactgggggt tccacctcac aagcggcagg
 480
 ttgccttttg gagctgtcgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac cctcgtccag gcctggccca ggagccgggt aggaacctgg ggctgttgtg
 600
 caggggtgcg cgtctccagc ttctgcccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca
 720
 gcatcccccag tctaatgggt gccctgccca ctctcctgag tcccggtgca gagctcccc
 780
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaacccat
 840
 cagaacggct tctccaccg agtggttcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccggtg gacatgctat gaacagggtt taggtgggtg acagggcact gaggccgact
 960
 gccttgggtg tcagccacat ctgttgagat gcgtgtgctt gacgcccga cgcgt
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5					10					15	
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
			20					25					30		
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
			35					40					45		
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
			50					55				60			
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65					70					75				80	
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							

85

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct ccagaaacaa agtgggaaag ggaagcttag
60
cccgcgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccg
120
gctatcgcg cgacgggtgc cggcggaccc gtcctggcc ctggacgcgc tgccccgga
180
gtgtgtggtg caggtgctga gccacgtgcc ggccacgctc ctggacacg cgatgcgcc
240
cagtggtgcc cgctggcgcc gacatagtag acggggccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgcctgcccc
360
acaacgaaga caaagaggag ttcccgctgt gcgccctggc gcgctactga ctgcgcgcgc
420
cttcggccg caatctcatc ttcaactcct cgggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tggcccatag aaaagaacct aacaccgggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatgggtgctc caagaggcag cttgtggacc
600
tggatgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctcccg gtccgccttc
720
tggatgtgta tgaaaaggaa gtggtcaagt tctcagcctc acctgacctg gtccttcagt
780
ggactgagag gggctgcccga caggtctccc acgtcttcac caactttggc aagggcaccc
840
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
ccctgtgac ccaactccagt gtgagggtca ggatccgtct gtcctagcga ctggactact
960
gctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg
1020
atccctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatttt ctatgatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtgtgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa caccgacagt gtgtccattg
1260
gacaacagag agtgggaatt ccaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattgtt ttgttattca tttaatgact ttccctgctg ttacctaatt acaaattgga
1380
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1           5           10           15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20           25           30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35           40           45
Glu Trp Glu Phe Gln Lys Tyr Gly His
          50           55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgcttc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaagatt
120
accaaagtgc gtgcgcgcgc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcggttg ttttgaaact cgagcaccga aagacttcag
240
ccctgacgag ttacgcaaac gcaccgccgt ttctgcctct tcagatgggg tgtggccccc
300
cncnccccc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1           5           10           15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20           25           30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35           40           45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50           55           60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
          65           70           75           80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85           90           95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

```

<400> 1545
ccatggtgcg gccgtctggt aacgatagcg aaatccttgc catgccacca attcttcctt
60
caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
120
cgtctctgtc tcaagcacct cgctctgttc caggttcaag gcctggatag tgcgagtgtc
180
gtactggtcg atcacttcca ccgagtggtc tgggtagccc ctgcccattc gctttatgat
240
ctcaaccata gatgcatttg gcatgttcca gagcttgtag tccttaacga tctctctggc
300
gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
360
ac
362

```

```

<210> 1546
<211> 92
<212> PRT
<213> Homo sapiens

```

```

<400> 1546
Met Val Lys Ser Cys Glu Leu Ala His Leu Thr Asp Arg Leu Cys Leu
1 5 10 15
Lys His Leu Ala Cys Phe Gln Val Gln Gly Leu Asp Ser Ala Ser Val
20 25 30
Val Leu Val Asp His Phe His Arg Val Val Trp Val Ala Pro Cys His
35 40 45
Ser Leu Tyr Asp Leu Asn His Arg Cys Ile Trp His Val Pro Glu Leu
50 55 60
Val Leu Leu Asn Asp Leu Ser Gly Val Val Glu Asn Leu His Ala Ile
65 70 75 80
Val Arg Met Gly His Cys Gly Asp Val Pro Ser Arg
85 90

```

```

<210> 1547
<211> 429
<212> DNA
<213> Homo sapiens

```

```

<400> 1547
cgcgttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgctt
60
ctgcgcgctt cgggtgtggtt cagcgcctgt tcggcgtgga acctggagcg cgagcgcttg
120
cgcaaacctc gcctgccggc ctggcacttg aagaacgccg tgctcagtcg ctggatgtac
180
agcctgtgtg tgtggggggg gatgattgtc tggttgggcg cggcggtgat tccgttctcg
240
atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac
300
gggcttaaac gccagaagtt gcccaacggg cgttatgaac ggtgttcgcc tcggcactcg
360

```

tggaacagca accggattgt caccaatatac tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1548
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser
 1 5 10 15
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala
 20 25 30
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp
 35 40 45
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu
 50 55 60
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu
 65 70 75 80
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr
 85 90 95
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr
 100 105 110
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr
 115 120 125
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala
 130 135 140

<210> 1549
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 1549
 gtgcacaggc tccagggttc tgtttttag tgcaccogct gtggtgcaac atgcgtctgg
 60
 gcacaccagc gtgcgccgtt tctgtttgta gtcttctctc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcccat gcaacttttg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttctggggca acactccctc taggattttg gtctcccttt
 240
 tctctctggt ctttgaccac cgctaccagg caaactctct catctagacc agccagcatt
 300
 ggtttcttcc actccccag ctgcgcgctg ggaggcgcca ctgcaaaatt cccctggggc
 360
 tcccagctgc tcagagatcc ccatgccctt cctgatcagc ctccctgccc ggtttctcct
 420
 ccgacgcggc tgcattggata ttc
 443

<210> 1550

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1550

```

Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1           5           10           15
Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
          20           25           30
Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
          35           40           45
Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
          50           55           60
Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
65           70           75           80
Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
          85           90           95
Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
          100          105          110
Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
          115          120          125
Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
          130          135

```

<210> 1551

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1551

```

ccatggatcac cccacctctg gcactcaaca tgacttggtc gccacacacc aggaaacctc
60
agaggagcag ccagctggcc aagcacecct gccctgcc tcggggctcc acaaaagctg
120
gaggagcaaaa cgcagctcac ctctttttct gtccactgct tcaggggccta ccctgtgct
180
ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
240
gtctcttct ccatttggtc ctaacacagc ctccccagga gaccaggggc atccnnnnnc
300
ccnnnc
306

```

<210> 1552

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1552

```

Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1           5           10           15
Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
          20           25           30
Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

```

          35          40          45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
   50          55          60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
   65          70          75          80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
          85          95
Ile Pro Xaa Pro Xaa
          100

```

<210> 1553

<211> 657

<212> DNA

<213> Homo sapiens

<400> 1553

```

atcctgcaga atgatggcgt ggtcaccagc cccattatccc ggccacgcaa ggcggggccac
   60
acgctactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
   120
aaggccaagg agatcatccc caaggccgac ctgccagcgc cccggaagga gttcagcgcc
   180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gtcgcgagaa cggggctctcc
   240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccatgctg
   300
attgcccgct ttggccatgg ctccagctgag ctggagaact gcctctatgt ggtgggggga
   360
cacacatccc tggcaggggt ctcccccgcc tcgcctcttg tctccctgaa acaagtggag
   420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcgga tggcgtcagc
   480
aatgcgcgag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
   540
cgggacatgg tgtccaaggt ccagtgtcat gaccctcgcg agaacagggt gacgatcaag
   600
gccgagtgcc ccagccttg gcggtacaca gccgtgccg tcctgggcag ccagatc
   657

```

<210> 1554

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1554

```

Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
   1           5           10           15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gln Thr Phe Met Cys
          20          25          30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
          35          40          45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
          50          55          60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```

```

65              70              75              80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
85              90              95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
100             105             110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
115             120             125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
130             135             140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145             150             155
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
165             170             175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
180             185             190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
195             200             205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
210             215

```

<210> 1555

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1555

```

acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaaggtga gcgtgattct
60
ggaggagcct gccttgccgc gacggtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaagggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtgta gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1556

```

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1      5      10
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
20     25     30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
35     40     45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
50     55     60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

```

65              70              75              80
Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser
            85              90              95
Leu Pro Ser Ser His Ala
            100

```

<210> 1557

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1557

```

gtgcacagac ttttcgagcg ggccattaag tggtttacgt ctgggatcgg ctccgctttc
60
tcgcattttt cggatcaggt caaattctgt gctcggcatt gacaggaaat tgacgtgtat
120
cagtcgatlc tttgcagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac
180
gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg
240
ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccgggaagc
300
gaagctcgat gggcagcagg cgcattgagga acccggcgcc attgaatcgt gaggcgctgg
360
cggagcgcgg cccgttcaaa tgcgacgcgt
390

```

<210> 1558

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1558

```

Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser
1              5              10              15
Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln
20              25              30
Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser
35              40              45
Thr Trp Cys Gly Met Val Val Val Leu Leu Ser Ala Tyr Ser Ala
50              55              60
Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu
65              70              75              80
Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser
85              90              95
Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser
100              105              110
Val His

```

<210> 1559

<211> 556

<212> DNA

<213> Homo sapiens

<400> 1559

accggtggcg acggtatcgg tggcgcgctcg atccttgccct cggaaatcctt cgctgcagag
 60
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcattggagaa gctgctcatc
 120
 gagtgacacc ttgacctctt caacgccggg gtagttgagg ccttgacagga ttctgggtgcc
 180
 gccggaatct cctgtgccac ctccgagctg gccagtgctg gcgacgggtgg catgcacgtc
 240
 gagctcgacc gcgttcgcct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc
 300
 gaggccccag agcggtatggc cgcggtgggtg cgccccgac agcttgaccg cttcatggag
 360
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccgggtcga
 420
 cttcacattg attggcaggg cgagcggatt gtcgaagctg atccgcggac gggtgctcac
 480
 gacggacccg tttctgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
 540
 aacgacgcta acgctg
 556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

Thr Gly Gly Asp Gly Ile Gly Gly Ala Ser Ile Leu Ala Ser Glu Ser
 1 5 10 15
 Phe Ala Ala Glu Gly Glu Ser Lys Arg Pro Ser Val Gln Val Gly Asp
 20 25 30
 Pro Phe Met Glu Lys Leu Leu Ile Glu Cys Thr Leu Asp Leu Phe Asn
 35 40 45
 Ala Gly Val Val Glu Ala Leu Gln Asp Phe Gly Ala Ala Gly Ile Ser
 50 55 60
 Cys Ala Thr Ser Glu Leu Ala Ser Ala Gly Asp Gly Gly Met His Val
 65 70 75 80
 Glu Leu Asp Arg Val Pro Leu Arg Asp Pro Asn Leu Ala Pro Glu Glu
 85 90 95
 Ile Leu Met Ser Glu Ser Gln Glu Arg Met Ala Ala Val Val Arg Pro
 100 105 110
 Asp Gln Leu Asp Arg Phe Met Glu Ile Cys Ala His Trp Gly Val Ala
 115 120 125
 Ala Thr Val Ile Gly Glu Val Thr Asp Thr Gly Arg Leu His Ile Asp
 130 135 140
 Trp Gln Gly Glu Arg Ile Val Asp Val Asp Pro Arg Thr Val Ala His
 145 150 155 160
 Asp Gly Pro Val Leu Asp Met Pro Ala Ala Arg Pro Trp Trp Ile Asp
 165 170 175
 Glu Leu Asn Glu Asn Asp Ala Asn Ala
 180 185

<210> 1561
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 1561
 acgcgtgaaa ggtttgagag aagagagatg ccgctattga atctgctgga gttttacatc
 60
 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccattt tgtcattgat tcatctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttggaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgtgtgttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaaagtc catgttgttg aactctgact gttctctttg gaattgaacg ttttgcaccc
 420
 tctctctgtg gctttaggtc tgacattgta tttgacctt actagt
 466

<210> 1552
 <211> 130
 <212> PPT
 <213> Homo sapiens

<400> 1552
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro
 1 5 10 15
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
 20 25 30
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
 35 40 45
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
 50 55 60
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
 65 70 75 80
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
 85 90 95
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
 100 105 110
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
 115 120 125
 Gly Met
 130

<210> 1563
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1563

ctgggggggtg ttgtcggcct gctgtcgggtg tacttgccgc gttggctgca tgaacacccg
 60
 atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta
 120
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
 180
 ggtgtggttg tggtcatect gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
 240
 ccgacgggtg cgctgcaagc caacagccctg gcgatcgta cgctgagcct gggctgcatt
 300
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
 360
 tgctgctggc cacttccctg acgctgtatc acagcctgat ggcccagacg gaatggttga
 420
 ataagtgtac gcgt
 434

<210> 1564

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1564

Leu	Gly	Gly	Val	Phe	Gly	Leu	Leu	Ser	Val	Tyr	Leu	Pro	Arg	Trp	Leu
1				5					10				15		
His	Glu	Thr	Pro	Ile	Phe	Ala	Glu	Met	Gln	Gln	Arg	Lys	Thr	Leu	Ala
			20					25				30			
Ala	Glu	Leu	Pro	Leu	Arg	Ala	Val	Leu	Arg	Asp	His	Arg	Gly	Ala	Ile
			35				40				45				
Val	Leu	Ser	Met	Leu	Leu	Thr	Trp	Leu	Leu	Ser	Ala	Gly	Val	Val	Val
			50			55					60				
Val	Ile	Leu	Met	Thr	Pro	Thr	Val	Leu	Gln	Thr	Val	Tyr	His	Phe	Ser
65					70					75				80	
Pro	Thr	Val	Ala	Leu	Gln	Ala	Asn	Ser	Leu	Ala	Ile	Val	Thr	Leu	Ser
			85					90				95			
Leu	Gly	Cys	Ile	Ala	Ser	Gly	Ala	Leu	Ala	Asp	Arg	Phe	Gly	Ala	Gly
			100					105				110			
Arg	Val	Leu	Val	Thr	Gly	Trp	Arg	Cys	Cys	Trp	Pro	Leu	Pro	Gly	Arg
		115				120					125				
Cys	Ile	Thr	Ala												
			130												

<210> 1565

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1565

ccatggctgt agcccttggg tcaacaagag ccgtctactg acgctaacc accatgagcc
 60
 agaggggtgag cggttctggc acctactgga ccataaagc aataaagagg acaagggagc
 120
 ctgcattcgg ccattttcttc ccaagaatca ccataaaggt tgtcaaatc aaggaccctg
 180

atccgggtgat tctcgaagtc atcgatgagc agaacaagtt tacccccgag ggagaaaagc
 240
 ggggtgggtgct cttgatgctc gacaacctct accgtcccag taccaccggt gcattggcgga
 300
 acggggggcggt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1566
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala
 1 5 10 15
 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile
 20 25 30
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu
 35 40 45
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val
 50 55 60
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala
 65 70 75 80
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val
 85 90 95
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly
 100 105

<210> 1567
 <211> 917
 <212> DNA
 <213> Homo sapiens

<400> 1567
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 aagccgctgc actcctgggg gaccagcttt gatgcctcca ggaggataag tctgaagccg
 120
 ggttgggaag ggagcggaga gggccaaaca gaggcagagg cagcgccctc tgctggcacc
 180
 ctggagacag ctctggctgc gggggccctg ccttctatgc ctccccagct ttcaggacac
 240
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg tggggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggaactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgaggggct gtccgggagg
 480
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgccac cagcggggac ctccggagcta tgccttgata aggcgaagtga gggttacatgt
 600
 acgatgatgc ggttttgctt gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactcgagct tcagctggcg tggatgggggt gcttacagga gcagcaggcg tgaggagagat
 780
 gacagcagta cgaatcgtgg ctctcctgag gcctggggtt cctcatatgt aaaatggggg
 840
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 900
 ggctgaagag ctgggtc
 917

<210> 1568

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1568

Met	Gly	Pro	Ala	Leu	Pro	His	Val	Phe	Glu	Ser	Gln	His	Leu	Ser	Pro
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Leu	Leu	Cys	Ile	Cys	Gly	Ser	Gln	His	Cys	Leu	Pro	Pro	Tyr	Pro	Asp
		20					25					30			
Ser	Phe	Arg	Arg	Leu	Gly	Gly	Gln	Pro	Gly	His	Phe	Cys	Arg	Asp	Pro
		35					40				45				
Arg	Leu	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Gly	Gly	Leu	Glu	Gly	Arg	Gly
		50				55					60				
Pro	Ala	Ala	Glu	Ala	Val	Ser	Arg	Val	Pro	Ala	Glu	Gly	Ala	Ala	Cys
65				70						75				80	
Cys	Ser	Val	Trp	Ala	Ser	Pro	Leu	Pro	Ser	Gln	Pro	Gly	Phe	Arg	Leu
			85							90				95	
Ile	Leu	Leu	Glu	Ala	Ser	Asn	Trp	Val	Pro	Gln	Glu	Cys	Ser	Gly	Phe
			100					105						110	

Pro

<210> 1569

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1569

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 120
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accacctcc tacagtgcac
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
 360
 acagccaacc cggagatct
 379

<210> 1570
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1570
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr
 1 5 10 15
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg
 20 25 30
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys
 35 40 45
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr
 50 55 60
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala
 65 70 75 80
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro
 85 90 95
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu
 100 105 110
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 115 120 125

<210> 1571
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1571
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 120
 gatgcgttcg gcattgtcgc cgaatgggtc ggattggaca acttccgcaa cctgctggat
 180
 gaccocacct acctgaattc cttccagcgc accgcctgtt tctcgggtgt ggtggcaggg
 240
 gtcgggatcg ccgtgtcact gggctctggcg atctttgcgc accccatcac tccgtgcgca
 300
 tgtgtacaag acacactgct gatcgtgcc taccgcctgg caccatgat cgcgcgc
 357

<210> 1572
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1572
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

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      1           5           10           15
Gln Met Phe Ile Ile Gly Ile Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
      65           70           75
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1573

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120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggt ataacaccgc
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttggcaa
240
gcgacttcgg gactacttca actctgagaa gcctgaagga cgcatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaatatt
337

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<210> 1574

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1574

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Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
65           70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
85           90           95

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<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgctcgc tcgactcccc
 180
 gcccatgttg agggccgccc gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgcccagccc gtggcgggtg tgcgtcatcg gtggggtgag cgcacccgag
 360
 gctcaagacg tagcccgggg gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
 1 5 10 15
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577
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 ccccatcctg cgggcttgcg cagggttgcg ctgaacccg gcgtcgcgca cgcgcgcacc
 120
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 180
 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag
 240
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 287

<210> 1578
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1578
 Leu Val Leu Gln Arg Pro Ile Ser Ala Leu Arg Met Leu Ile Gly Gly
 1 5 10 15
 Pro Leu Arg Ile Pro His Pro Ala Gly Leu Arg Thr Val Ala Leu Glu
 20 25 30
 Pro Gly Val Ala His Ala Arg Thr Leu Arg Val Ala Gly Ala Gly Phe
 35 40 45
 Pro Ala Arg Gly Gln Arg Ala Ala Gly Asp Leu Val Ile Glu Leu Glu
 50 55 60
 Pro Met Leu Pro Gln Ala Pro Asp Lys Gln Leu His Ala Leu Ile Glu
 65 70 75 80
 Gln Leu Asp Val Ala Leu Gly Lys Ser Ala Thr Arg His Phe Pro
 85 90 95

<210> 1579
 <211> 2829
 <212> DNA
 <213> Homo sapiens

<400> 1579
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 120
 gggcgggcg ggagccccg cagtcgggg tcgcccgcga gggccatgct gctgtgggg
 180
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 240
 gccgcgcga cctcaaccg cctgcgggag ccgctgctgc ggaggtcag cgagctctg
 300
 gatcaggcgc ccgagggcgc gggctggagg agactggcgc agctggcggg gagtgcgggg
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 420
 ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aaggttgac agtcacagaa
 480

ttgagtgtatt tctctgcaggc tatggaacac actgaagttc ttcagcttct cagcccccca
540
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600
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660
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720
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780
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840
aagtgtgaaa tctgtgttga accaacttcc caaaagctga tggcaggcag cacattggtt
900
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960
ccattaacac atgagaccaa aaagctatc atgggtgcctt atgcggattt ggaacaccaa
1020
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1080
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1140
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1260
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1320
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1380
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1440
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1560
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1620
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1680
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1740
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1860
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1980
gctgagtttt ccaatgtcat gatcatctat acaagtatag ttacaaacc accggagata
2040
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2100

gcaataaag gcacacctga agaaactggc agctacttgg tatcaaagga tcttcccaag
 2160
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 2220
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 2280
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 2340
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 2580
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 2820
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<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35					40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
		50				55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65				70					75					80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85						90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
			115				120					125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
			130				135				140				
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145				150						155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile


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          595              600              605
Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
  610              615              620
Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
  625              630              635              640
Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
          645              650              655
Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
          660              665              670
Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
          675              680              685
Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
          690              695              700
Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
  705              710              715              720
Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
          725              730              735
Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
          740              745              750
Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
          755              760              765
Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
          770              775              780
Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
  785              790              795              800
Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
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Asp Arg Leu Arg Ile Ser Glu Lys
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<210> 1581

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1581

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  120
ggataccccc atgtgcccg ttcgaaggag aagttcgagt cccactaccc gggtagcttc
  180
atctgtgtagt ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc
  240
ctgggtgtttg acgagtcttc gtaccgcaat gtgctgtgtc tggggcacat ctggcccgag
  300
gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgccatcccc gctcaggat
  360
tccacaggtg ccgacgcgct gcgttggttc atggcgggcg acggctcccc atggagtgca
  420
cgacgc
  426

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<210> 1582

<211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1582
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
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 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
 20 25 30
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
 35 40 45
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50 55 60
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Ala Val Gly Thr
 65 70 75 80
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
 85 90 95
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
 100 105 110
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
 115 120 125
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
 130 135 140

<210> 1583
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 1583
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 120
 cctaaggga taggttcagg gtagaaggca ggtttcaggg atggtttagg gagttctggg
 180
 gaaatgggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
 240
 gggttcaggca gttacacaga ttacaggaat ggttttaggca gttctggaaa aatcagttca
 300
 ggggatgagg caggttataa gaatgtttta gggggttctg ggaggaatcc attaggggagc
 360
 gaggcaggtt ctagggttag tttggaggat tctgggtaca tctgtcatg gaatgaggca
 420
 gggtctaggc aaggctttgg gggaactagt
 450

<210> 1584
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 1584
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

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      1           5           10           15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala
      20           25           30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser
      35           40           45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser
      50           55           60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met
      65           70           75           80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly
      85           90           95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly
      100           105           110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu
      115           120           125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln
      130           135           140
Gly Phe Gly Gly Thr Ser
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<210> 1585

<211> 596

<212> DNA

<213> Homo sapiens

<400> 1585

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120
ggcagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg
180
gaaggaaaga gcggcaggtc cagagaaaacc ggcctctccc aaaaagttat caaacactgg
240
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300
aaccctccta taacggtttt agaagatate agaattgate cacagcccac ctctttagaa
360
cattacaaat ctgatgcate attcagtaaa aggtcttcta gaacgagatt tactgactac
420
cagcttaggg ttctgcaaga cttttttgac acaaacgcctt acccaaaaga tgatgaaata
480
gaacaactct ccaactgttct caatctgcct acccggttta ttgttgtatg gtccagaat
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596

```

<210> 1586

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1586

Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100           105           110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115           120           125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130           135

```

<210> 1587

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1587

```

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttctctt ggcttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tgttcccagc agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcggtgctc tgacagctca gacccacagc cgcaggtgct cccgacagct cagacccag
300
accgcgggtg ctcttgacag ctcagacccc agaccgcgcg tgctcccagc agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcggtgctc cgacagctca
420
gacccacagc cgcggtgctc cctgacagct cagacccag accgcgggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

```

<210> 1588

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1588

```

Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

      35              40              45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
  50              55              60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
  65              70              75              80
Pro Asp Arg Gly Cys Ser
      85

```

<210> 1589

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1589

```

aagcttgctg gggacaccct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
  60
tccaccgggt ccaactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
  120
tgccctaactg ttgctgacca ccaagagggc gggcggtggac ggttcacgcg cagttggcag
  180
gatgtccccc gtaacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtgcgag
  240
gactgggggct ggctgtcgat ggttcggggg ctgcgtgttg tcaaggtcat caaggaggtc
  300
ggtaggggctg accgttcccg agtgacgctg aagtgggcca atgatgtgct cgtggatctg
  360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
  407

```

<210> 1590

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1590

```

Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
  1              5              10              15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
  20              25              30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
  35              40              45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
  50              55              60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
  65              70              75              80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
  85              90              95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
  100              105              110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
  115              120              125
Cys Gly Ile Leu Ser Glu Arg
  130              135

```

<210> 1591

<211> 424

<212> DNA

<213> Homo sapiens

<400> 1591

agatctctct ccoctgagata acccaggcctt tagaaccacaa gagctgagag accctgtccc
 60
 ttccagagagg cacttgacacc tagaggagtc tctgggaagc agatggggat atgggacaga
 120
 cgcacattga aaaagccccc agatgcctcc ctatggagga cctcaccacac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgtgtgctg ccoctgcacag
 240
 aacgtccagc gagtcctgac ttccagcccg ctgcgcttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcgg cccacagcagt ctggcccagc ctgtccagta ctcccttgac
 360
 tctgggatcc ctggctgctc acgccccctga ggaacctctg gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1592

Met	Gly	Ile	Trp	Asp	Arg	Arg	Ile	Leu	Lys	Lys	Pro	Pro	Asp	Ala	Ser
1			5					10					15		
Leu	Trp	Arg	Thr	Ser	Pro	Thr	His	Ile	Thr	Ser	Arg	Glu	Leu	Gly	Thr
			20					25					30		
Tyr	Pro	Asn	His	Arg	Gly	Val	Thr	Val	Val	Pro	Ala	Gln	Asn	Val	
			35					40				45			
Gln	Arg	Val	Leu	Thr	Phe	Gln	Pro	Leu	Arg	Phe	Ile	Gln	Glu	His	Val
			50			55					60				
Leu	Ile	Pro	Val	Phe	Asp	Leu	Ser	Gly	Pro	Ser	Ser	Leu	Ala	Gln	Pro
			65			70				75				80	
Val	Gln	Tyr	Ser	Leu	Asp	Cys	Gly	Ile	Pro	Gly	Cys	Ser	Arg	Pro	
			85					90						95	

<210> 1593

<211> 1678

<212> DNA

<213> Homo sapiens

<400> 1593

cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg
 60
 atgagaaaatg agccccattga agggcaaacctc tcactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gtttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagaccctg aatttgatgg tactgaagtt
240
ttaaaggggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaaat tcggtctttt cgagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattgggatg atatgtctga aatggtgaaa
540
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagtgtg gtcaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga
720
agactcctg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaag tcatggtcca
960
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaacag
1020
tgctttctga aacaacaaag ccaaacttcc attggtcagg taattcagga ggggtgggag
1080
gaccggttaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc
1140
tataagccta atctcataat gtatttcttt ttgaaactg atttgtttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaaata tghtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagttag acatcactgg
1320
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taacatatg
1380
tccattaaag aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt
1440
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc
1560
tgtaaaaatg aagaaaaattt aatattttga ctaacatgac ttttctgttt gtatcattta
1620
aaggcaataa aacttgggtac gtatttcata tctattttaa aaatgaaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1 5 10 15
 Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20 25 30
 Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35 40 45
 Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50 55 60
 Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65 70 75 80
 Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85 90 95
 Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
 100 105 110
 Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
 115 120 125
 Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
 130 135 140
 Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
 145 150 155 160
 Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
 165 170 175
 Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
 180 185 190
 Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
 195 200 205
 Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
 210 215 220
 Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
 225 230 235 240
 Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
 245 250 255
 Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
 260 265 270
 Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
 275 280 285
 Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
 290 295 300
 Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
 305 310 315 320
 Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
 325 330 335
 Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
 340 345 350
 Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
 355 360 365

<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595
 accggtcccg ctcacaggcc cacacctgct tctctctctg gggcagggca gcctgggtggg
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 gcatggccgg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg cccagccagg gagagcatct tcccgtctggg accttccccg gggcggtcca
 180
 tcccttgagg atgtagggtg cagctgagat ggtggcgccc ccattctctg tgttcgccag
 240
 cctgggctgg ggttactagg atcacccttg ggtgatgag gagcccggtt cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgccccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tctctctctg tgggcccgcg cccgtggaga gcaagtggga actgacctta tcttctgtcc
 480
 cagcttgtag agccagcatc aaggtcaggc ctcacttgcc caagaaagag gagtgaggag
 540
 gcccactgga ggaacgct
 559

<210> 1596
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1596
 Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu
 1 5 10 15
 Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu
 20 25 30
 Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp
 35 40 45
 Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro
 50 55 60
 Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile
 65 70 75 80
 Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Glu Trp Gly Arg His
 85 90 95
 His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu
 100 105 110
 Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys
 115 120 125
 Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro
 130 135 140
 Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp
 145 150 155 160
 Ala Cys Glu Arg Asp Arg
 165

<210> 1597
 <211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc ctctgggcct acccataatc ctctgggacct tgaacgggta
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 ccgggtgggt ccggtgggtg ttcagcagct agcttggctt cctttcaggc cccgttggct
 120
 ttggggcactg ataccggggg ctccgatccgc caacctggag cggtagccgg caccgtcggg
 180
 atcaagcga cctacgggtc gacctccga tacggcggtta tcgctatggc ttcattcttg
 240
 gatactcctg ggcctgcgc ccgtaccgct cttgacggcg cgttgcctca tcaggccatt
 300
 gccggtcacg acgctatgga ccagaccacg attaatcagc ccaccccgcc ggctcgttag
 360
 gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
 420
 cagggttacg accctcaggt cgaggcccggt ttccacgagg ctgtcgagat gctaataagag
 480
 gcggggggctg aggtcgttga ggtctcttgc ccgaacttgc acctcgccct acctgcttat
 540
 taccttattc agcctgcga ggtgtctagc aacctggctc gttacgacgc catgcgttac
 600
 ggcttacgc
 609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser Ser Thr Glu Thr Ser Ala Phe Gly Pro Thr His Asn Pro Trp Asp
 1 5 10 15
 Leu Glu Arg Val Pro Gly Gly Ser Gly Gly Ser Ala Ala Ser Leu
 20 25 30
 Ala Ser Phe Gln Ala Pro Leu Ala Leu Gly Thr Asp Thr Gly Gly Ser
 35 40 45
 Ile Arg Gln Pro Gly Ala Val Thr Gly Thr Val Gly Ile Lys Pro Thr
 50 55 60
 Tyr Gly Ser Thr Ser Arg Tyr Gly Val Ile Ala Met Ala Ser Ser Leu
 65 70 75 80
 Asp Thr Pro Gly Pro Cys Ala Arg Thr Val Leu Asp Ala Ala Leu Leu
 85 90 95
 His Gln Ala Ile Ala Gly His Asp Ala Met Asp Gln Thr Thr Ile Asn
 100 105 110
 Gln Pro Thr Pro Ala Val Val Glu Ala Ala Arg Gln Ala Asp Val Ser
 115 120 125
 Gly Val Arg Ile Gly Val Val Thr Glu Leu Ser Gly Gln Gly Tyr Asp
 130 135 140
 Pro Gln Val Glu Ala Arg Phe His Glu Ala Val Glu Met Leu Ile Glu
 145 150 155 160
 Ala Gly Ala Glu Val Val Glu Val Ser Cys Pro Asn Phe Asp Leu Ala

	165		170		175
Leu	Pro	Ala	Tyr	Tyr	Leu
		Ile	Gln	Pro	Ala
		Glu	Val	Ser	Ser
		Asn	Leu		
	180		185		190
Ala	Arg	Tyr	Asp	Ala	Met
		Arg	Tyr	Gly	Leu
	195		200		

<210> 1599
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 1599
 gcgtggccga cggtctgtgt gtggtcagcg atctttattt ttcttgatcg attcagaacc
 60
 cggcacctgc acgtgtggtt tctctgcttt tgttggggag cgtgcgtcgc gacctggatt
 120
 agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg ggttgatcca
 180
 gcacggggcg ccggtccggc agtgatttcg gctccctttg ttgaggaatc atgcaaggcg
 240
 ctgtgtcttt tcgcgctggc catcggcatg gggcgacgga tgacctcggg agttcagacg
 300
 gtgagcatgg ccgggctctc ggcaattggt ttgcctttg ttgagaacat tatgtactac
 360
 gccctgtcag ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcggt
 420
 gatgaagttg gtgctgttcg ggggagtgtg tgctctggtt gggcatccgc tgttcaccag
 480
 catgacgggt atcgggtctg cccttgggct gaggtcacga agttga
 526

<210> 1600
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1600
 Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly
 1 5 10 15
 Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe
 20 25 30
 Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
 35 40 45
 Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
 50 55 60
 Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
 65 70 75 80
 Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
 85 90 95
 Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
 100 105 110
 Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
 115 120 125
 Ala Glu Val Thr Lys Leu

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

gcccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
 60
 atgcacaaacg tccgaaaggg ggtgggtgac aaagtattcc ttgacaatgt cacgctgtcg
 120
 ttcttcccg gcgccaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
 180
 ctcaagctca tggctgggtct cgataagccc aataacggcg atgccaaact ggctaaaggg
 240
 gccacgctcg gaattcttgc tcaggagccc ccgctcacgg aggacaaaaac tgttcgagag
 300
 aacgtcgaaag aggcgcgtcg cgacatcaaa gccaaagctgg caccggttcga ggaagtctcc
 360
 gccgagatgg ccaacctga cgcgacttt gacgccttga tggcggagat ggggtgagctg
 420
 cagaccgagc tcgataacgc caacgcg
 447

<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

Met	Ala	Glu	Phe	Ile	Tyr	Thr	Met	His	Asn	Val	Arg	Lys	Ala	Val	Gly
1				5					10				15		
Asp	Lys	Val	Ile	Leu	Asp	Asn	Val	Thr	Leu	Ser	Phe	Phe	Pro	Gly	Ala
		20					25					30			
Lys	Ile	Gly	Val	Val	Gly	Pro	Asn	Gly	Ala	Gly	Lys	Ser	Thr	Met	Leu
	35					40					45				
Lys	Leu	Met	Ala	Gly	Leu	Asp	Lys	Pro	Asn	Asn	Gly	Asp	Ala	Asn	Leu
	50				55				60						
Ala	Lys	Gly	Ala	Thr	Val	Gly	Ile	Leu	Leu	Gln	Glu	Pro	Pro	Leu	Thr
65				70					75					80	
Glu	Asp	Lys	Thr	Val	Arg	Glu	Asn	Val	Glu	Glu	Ala	Val	Gly	Asp	Ile
				85				90				95			
Lys	Ala	Lys	Leu	Ala	Arg	Phe	Glu	Glu	Val	Ser	Ala	Glu	Met	Ala	Asn
			100				105					110			
Pro	Asp	Ala	Asp	Phe	Asp	Ala	Leu	Met	Ala	Glu	Met	Gly	Glu	Leu	Gln
	115					120					125				
Thr	Glu	Leu	Asp	Asn	Ala	Asn	Ala								
	130					135									

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603
 acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
 60
 gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg
 120
 cacgggtttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg
 180
 catcaagtcg cgttgttggg cgggatggtc aagggcccg cctattacaa cccgcggcgc
 240
 aatccggaac gtgcgctcga gcgtcgtaac ctgggtgctgg atgtgctgga acagcagggt
 300
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
 360
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaacy ccagttgcgt
 420
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
 480
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
 540

<210> 1604
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 1604
 Thr Arg Lys Leu Thr Glu Ala Met Met Ala Met Leu Leu Glu Leu His
 1 5 10 15
 Tyr Ser Lys Gln Glu Ile Leu Glu Ala Tyr Leu Asn Glu Val Phe Val
 20 25 30
 Gly Gln Asp Gly Gln Arg Ala Val His Gly Phe Gly Leu Ala Ser Gln
 35 40 45
 Phe Phe Phe Gly Gln Pro Leu Ser Glu Leu Lys Leu His Gln Val Ala
 50 55 60
 Leu Leu Val Gly Met Val Lys Gly Pro Ser Tyr Tyr Asn Pro Arg Arg
 65 70 75 80
 Asn Pro Glu Arg Ala Leu Glu Arg Arg Asn Leu Val Leu Asp Val Leu
 85 90 95
 Glu Gln Gln Gly Val Ala Thr Ala Glu Gln Val Ala Ala Lys Lys
 100 105 110
 Met Pro Leu Gly Val Thr Thr Arg Gly Lys Leu Ala Asp Ser Ser Phe
 115 120 125
 Pro Gly Phe Ile Asp Leu Val Lys Arg Gln Leu Arg Glu Asp Tyr Arg
 130 135 140
 Asp Glu Asp Leu Thr Glu Glu Gly Leu Arg Ile Phe Thr Ser Phe Asp
 145 150 155 160
 Pro Ile Leu Gln Met Lys Ala Glu Ala Ser Val Asn Asp Thr Phe Lys
 165 170 175
 Arg Leu Thr Gly
 180

<210> 1605
 <211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

acgcgttggt gcggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
 60
 cattctttgc gggcgggata tgcactggga tattgcggcc catcgccgtg gaccacacat
 120
 cgcagcgtg gaccaccag cccacctggg cccactcgca cgtgccagta ctgtccgcac
 180
 gcaagaata gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
 240
 ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
 300
 tctttctect tcacaaagta ttggttaatt gtcacttagc ttatcgctc ggaatctgtg
 360
 aaccgttaac atcccgaacg ggaagctaac tagcaagcag tctaatagcac tcccgggcca
 420
 aatgttg
 427

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
 1 5 10 15
 Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
 20 25 30
 His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
 35 40 45
 Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
 50 55 60
 Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
 65 70 75 80
 Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
 85 90 95
 Arg Thr Asn Ala
 100

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

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 120
 cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
 180

ttgtgtacg gattcatattt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,
 240
 ttctgttg caccggatgc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
 300
 atggaaaaag gactgagccg cgtctacccc gacgcccggt ttatccatgt gccgatggcg
 360
 gacggaggcg aaggcacggt gcagtcgctg gtcgac
 396

<210> 1608
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 1608
 Thr Gly Lys Pro Phe Leu Leu Ala Pro Asp Ser Phe Lys Glu Ser Met
 1 5 10 15
 Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val
 20 25 30
 Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu
 35 40 45
 Gly Thr Val Gln Ser Leu Val Asp
 50 55

<210> 1609
 <211> 505
 <212> DNA
 <213> Homo sapiens

<400> 1609
 acgcgtagat gccacagcgc caggacacac gccaccgagg agccgaggat gatccacatg
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 ggctcgactc acatggagcgc catggattcg gcagtggaga gcaggccgcg agcttcgcac
 120
 gccgcccagc tgcgtagtcg cgtcatetca gtgcacatct gttcttcccc gtcacgagg
 180
 ttcgcggcgt aggcacatcgt tacgtccagc atgggtggcga tctcagcaat gtcacagccg
 240
 gccttgttga gggcgaggag ccgagcgcgc gtgcttctcg ctggcacgat gcgttcacgt
 300
 gctgcgttga tgcgtcgat actgatatgc aggatgcgcc cgggggtcgaa gacggggaat
 360
 ggggtgaatt ggacggtccc cctggccag cgagtcgctg gacgattcga ctggggacat
 420
 gcgcgagcag ggcgacgaca gccacggaa cgcggcattc atggacgagg gaacggacat
 480
 ggagcgagaa aaagcgggcg tcgac
 505

<210> 1610
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1              5              10              15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
      20              25              30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
      35              40              45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
      50              55              60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
      65              70              75              80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
      85              90              95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
      100              105              110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
      115              120              125
Met

```

<210> 1611

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1611

```

acgcgtgctg cggttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
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120
agaatgttcg atggtattga attcgtggt tttcacaaac aagctgggtg agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat ttgggataac tagaaggaat aaacttaact
300
tacgttgtag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctattgta
360
gggtgtaaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggt gggttcagtc tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

<210> 1612

<211> 177

<212> FRT

<213> Homo sapiens

<400> 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1              5              10              15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```


20 25 30
 Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
 35 40 45
 Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
 50 55 60
 Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
 65 70 75 80
 Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
 85 90 95
 Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
 100 105 110
 Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
 115 120 125
 Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
 130 135 140
 Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
 145 150 155 160
 Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
 165 170 175
 Thr

<210> 1613

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1613

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 caggcgctcc aggttttgcg cctcctggta cgttgctaca caattgtctca cctcccagcg
 120
 gatatcaatc aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
 180
 tatatacaag gaattcacta tatattgggt gaaaggagat ctccccgttc ctgttcttcc
 240
 tctgccgcat cctgtgaagc gtcaggagg gtcgacatgg ataattgtgcg tatgcctggc
 300
 acggtaaaagt gtccggggct tgtagatgcg tgtgaacgtt ttcgtgactt gaagaggctg
 360
 aagctgatgt gtccgctga gtcgatgca gcgcgctgcg ttgcgtgctt tgtggcgat
 420
 cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
 480
 gtggcgagg cgatgagttc ctcatattgcg tctttctcga ggtcttggtc catgtccata
 540
 aacataccaa agctggatgg gtcatacgac ggccgagcat gcat
 584

<210> 1614

<211> 153

<212> PRT

<213> Homo sapiens

<400> 1614

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1 5 10 15
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Val Arg Cys
 20 25 30
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35 40 45
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50 55 60
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65 70 75 80
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85 90 95
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100 105 110
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115 120 125
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130 135 140
 Pro Ile Glu Cys Gly Val Val Phe Ser
 145 150

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

gccggccttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
 tcgggtgcttg tcatgtctgg tgatcatcatt tccctgcttg gggctctact ggctggatc
 120
 ctactgtgcy gtgagacgat gcagggtgccg ggtgaggacg gcaccatgcc gaaactgttc
 180
 ggacgggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgctctc
 240
 cagatatgcc ttgtcatgac ggtgttgttg gacggtgctt acttggcgat ggcgaccctg
 300
 gctgccgccc tcatcctggt gccgtacctg ctgtcagcgg cattcgccct gaagatgggt
 360
 atc
 363

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1 5 10 15
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20 25 30
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

      35              40              45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
   50              55              60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
   65              70              75              80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85              90              95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100              105              110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115              120

```

<210> 1617

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1617

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accggtgact acctgtggga gaagaagggc atcgttccca tctccaagat tgataagggc
   60
ctggctgacg agggctgcca cgttcgtctc atgaagccga ttcccggcct cgacgagttg
   120
gtgcaccgcg ccgtcgagga gaagcacatc ttccgtacca aggagcgctc tgtcatcctg
   180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
   240
gtgcgcgctg cgggtcttgt gccgatcttc gaaccgcagg tcgacatcca cgctccacat
   300
aaggagaagc ctgaggaaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccc
   360
ctcgacgcca agatcatggt gaagctgacg atcccgagtt ccgaagacct gtatgccgac
   420
ctcattgcgg atccgaaggt cctacgc
   447

```

<210> 1618

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1618

```

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
   1              5              10              15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
   20              25              30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
      35              40              45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
      50              55              60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
      65              70              75              80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
      85              90              95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

```

      100              105              110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
      115              120              125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
      130              135              140
Pro Lys Val Leu Arg
145

<210> 1619
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1619
nnggtaccga aacccgtgtc gctaccgcat aaaatcaaag gaactagtat gcataacgta
60
acaacaaatg gtgcctccat tcccgccctt ggcccttgcca ctttccgtat gcccgcgcaa
120
gatgtgcttc gcatcgctcc ttacgcgctc aaggctgggtt ttcgccatgt cgataccgcg
180
cagattttat gcaatgaagt cgaggtcggt gaagcaattg cgacttccgg cgttcagcgt
240
ggcgcacatct ttctgaccac aaaagtcttg gtagataatt ataagcatga tgctttcact
300
gcactctgtcg atgaaagcct taccaaagctt aagaccgact atgtcgatct gctgc
355

<210> 1620
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1620
Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
1 5 10 15
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
20 25 30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
35 40 45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
50 55 60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
65 70 75 80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
85 90 95
Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
100 105 110
Asp Tyr Val Asp Leu Leu
115

<210> 1621
<211> 386
<212> DNA
<213> Homo sapiens

```

<400> 1621
 gcgcgccatg gaggcgcccc gggcgcgcgc aggatgctcc aggccaaagt aagcgggtccg
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 120
 cccccgaggc ggcggtaggc agcgcgtgg ccccgaggc cacgggtcaag gcagaaggcg
 180
 ctttgcgcgt ggagctggcc actgcgcgcg gtatgaggga cggcgcggcc acaaaagccg
 240
 acctgcccac ctacctgctg ctctctctcc tgetgctgct ctcgggggcg ctcggcgggc
 300
 tcttcacggt ttgccagctg cgccattcgg ctttcgcgcg gctgcccac gaccgcttcg
 360
 ctgcgcagcg ccgcgcgcgc ggaagg
 386

<210> 1622
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1622
 Met Glu Ala Pro Arg Val Ala Pro Gly Cys Ser Arg Pro Ser Glu Ala
 1 5 10 15
 Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile
 20 25 30
 Gln Arg His Gly Ala Gly Pro Arg Gly Gly Arg Gln Arg Ala Gly
 35 40 45
 Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly
 50 55 60
 His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala
 65 70 75 80
 His Leu Pro Ala Ala Leu Leu Pro Ala Ala Ala Leu Gly Gly Ala Arg
 85 90 95
 Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala
 100 105 110
 Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys
 115 120 125

<210> 1623
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1623
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 ggccttctgt tgtggttttt ctgggagctt tgggcccagg gtccccgga cctctccctg
 120
 aacttttccg cagtttcaga ggagagtctg caagttagag ctgcagtgtg tgtsccttgt
 180
 gcttggcacc caagcagggc atgggagctc taagtgggac cagggcctca aggacaacag
 240

agagccgcat ggcagggttag acacctggat aaaagtgggt gggggaagcc cactgctgca
 300
 ccccgggcat tgct
 314

<210> 1624
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1624
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly
 1 5 10 15
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro
 20 25 30
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
 65 70 75 80
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
 100

<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
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 60
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 120
 agggacaaga aagcatgact gtgcacaaat tggctttgca gccatctcca ccaggtagcc
 180
 ctggggagcac ctgggaagaa gccggggccat gcaggggacc caacctcacc ctgcattcag
 240
 aaccgggcct tggaatggcc tgatctgagc cctagcacc ctgggaagcc gccacccttt
 300
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 360
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 420
 ggggcacagt gagttggagc aggggattgg agggttttgt ggacagcctt ccagggcacc
 480
 tcaggagctg aattatttaa gccagctgct cgtggggccc gctcccagcc cttctgttt
 540
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 600
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 619

<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg
 1 5 10 15
 Ala Ala Gly Leu Asn Asn Ser Ala Pro Glu Val Pro Trp Lys Ala Val
 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
 100 105

<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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 60
 gatcaccagtg gggcgagggg gcaacgcgcg tgccgcgcgg atgcaaatca gtcattgatga
 120
 cacgaagtct atcgggatcc gctgacagac tccggtaaag tccccccat ggcagaacct
 180
 actggaaacc cggctgagtc cagctcggac ttcattcatc aggttggttc cgcggacatc
 240
 caacaggaca cctacggcgg gcgcgtccag acccggttcc cacctgagcc taacggctac
 300
 ctccacattg gccacgcgaa ggccatcgtc accgatttgc gcgttgccga ggatttcggc
 360
 ggcacctgca acctgagact tgatgatact aatccaggca ccgaggaaac ccgagtatgtc
 420
 gagtcgatcg tgcagacat tgagtggtta ggtaactccc cggcccacgt tgcacacgcg
 480
 t
 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
 Met Ala Glu Pro Thr Gly Asn Pro Ala Glu Ser Ser Ser Asp Phe Ile

1	5	10	15
His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg			
	20	25	30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly			
	35	40	45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly			
	50	55	60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu			
	65	70	75
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr			
	85	90	95
Ser Pro Ala His Val Val His Ala			
	100		

<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

```

ccaaattgct gggaatgtcc aaagtgtctac caggaggaca gctcggagaa agcccagaa
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cggaataatgg aagagagtga cgaagaagct gtgcaagcca aagtcctgcg gcccttgcgg
120
agctgctgatg agcctctcac gcccccgcct cattcaccca ctccatgct gcagctcac
180
catgaccctgg tttccccccg gggatgtgtg actcgggtcat cccctggggc tggccccagc
240
gaccaccaca gtgccagcgc cgtatgagcgc ttcaaacggc ggcagttgct ggggctgcag
300
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360
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420
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780
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960
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1020

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gatcttcggt gggcagtagg aatcaaggac cctcaaattc gggacttgct tactccaccg
1080
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2280
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2340
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2400
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2460
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2760
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4260

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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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Lys	Ala	Gln	Lys	Arg	Lys	Met	Glu	Glu	Ser	Asp	Glu	Ala	Val	Gln	
		20					25					30			
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40				45				
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
		50				55				60					
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
		65			70				75					80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
			85					90						95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115					120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
		130				135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
		145			150				155					160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
			165					170					175		
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Gly
		180				185							190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly	
		195				200					205				
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
		210				215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
		225			230				235					240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245					250					255		
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
			260				265						270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275				280						285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

```

      290              295              300
Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly
305              310              315              320
Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu
      325              330              335
Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln
      340              345              350
Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn
      355              360              365
Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp
      370              375              380
Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu
      385              390              395              400
Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser
      405              410              415
Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu
      420              425              430
Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr
      435              440              445
Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys
      450              455              460
Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile
      465              470              475              480
Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser
      485              490              495

```

<210> 1631

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1631

```

acgcgtgctc agccaagcct tagatgaaaa tgcgcttgct gacttttctg cgatgcaatg
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tcagaaccgc aacacacgtg cttcagacat ggcgggatgg aagacacttc agactctttt
120
ccatgttgac tctcgcgacg agcttgttga gttgcttgcc ttttcgaaag acgacattac
180
caaccaagtt cagcaagctg tgggcgcctt gggtttacgc ccactagaag atgaaaaagc
240
acaagggtga gatccggcgt cgcagggtccc gccagtcacc gacgaggacc ccactgcttt
300
cttcgatcaa gttccagatg tgccctctaga
330

```

<210> 1632

<211> 92

<212> FRT

<213> Homo sapiens

<400> 1632

```

Met Gln Cys Gln Asn Pro Asn Thr Arg Ala Ser Asp Met Ala Gly Trp
1          5          10          15
Lys Thr Leu Gln Thr Leu Phe His Val Asp Sér Arg Asp Glu Leu Val

```

```

          20          25          30
Glu Leu Leu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln
   35          40          45
Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
   50          55          60
Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
65          70          75          80
Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
          85          90

```

<210> 1633

<211> 259

<212> DNA

<213> Homo sapiens

<400> 1633

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ngggggacgt tggctatcaa tctgtcggga gctttcgtac tggcgacttt gctcgagctg
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ctcgtccacg ctggcccttg cccagggggtt cgtcgagcgg tgcggctatg catcgggtacc
120
ggattggttag gtggatttac gacttattcc gccctcacgg tggaaaccgg ccaacgtgtg
180
atgtcagggc agtgggttatg ggggtattgcc tatcttttga cgagtgtcgt ggcagggtgca
240
ttgttggcat gggtcatga
259

```

<210> 1634

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1634

```

Xaa Gly Thr Leu Ala Ile Asn Leu Val Gly Ala Phe Val Leu Ala Thr
  1          5          10          15
Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Val Arg Arg
   20          25          30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
   35          40          45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
   50          55          60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
65          70          75          80
Leu Leu Ala Trp Val Met
          85

```

<210> 1635

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1635

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nngtcctttt ttatgaaccg gcggactcgg ttggcgttgt ggggcagggg gtggtggagc
60

```

aagatggcgg ctcactctgtc ctacggccga gtgaacctaa acgtgttgcg cgaggcggtg
 120
 cgtcgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat
 180
 gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa
 240
 gtggaaaaaa tgttcacact taaaggaat cgtttgccgg cagctgatgt gaagaatata
 300
 attttttttg tcagaccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt
 360
 gaagatagac gaggcccaac gagagatttt catattctgt ttgtgccacg ccgtagcctg
 420
 ttgtgcgaac agcgggttgaa ggaatctgggt gtcttgggat cctttattca caggaggagag
 480
 tacagcttag atctcattcc attcgatggg gatctcttat ccatggaatc agagggtgca
 540
 ttcaaagagt gctacctgga gggtagaccag acgagcctgt accacgcagc caaggggctg
 600
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 660
 cgggtgagaa ccggctgctt tgtggtggta aaggagggcc cttcacacc caaaaggag
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 780
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 792

<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
1			5					10					15		
Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
		20					25					30			
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
	35					40					45				
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
	50			55				60							
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65			70					75					80		
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
		85					90						95		
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
		100					105					110			
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
	115					120					125				
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
	130				135						140				
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145			150					155						160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
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 120
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat
 180
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa
 240
 cgctttgttaa catcggatga ggcttgggat atgatgactt ctaagcagc tgcgttgttt
 300
 gtagatacac ataaacctga aatggctctta gatgaaaatg tcttaataaa agcaaacccg
 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
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tggccaaacg aactgatgga tgggctcttg gactggggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttccacc
 180
 ttcatgtcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctatttcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta
 300
 aactgtgcct cccctcactc atatgttgaa gtccctaacc taactacctc agaatgggac
 360
 gttatttgga aaaaag
 376

<210> 1642

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1642

Met	Asp	Gly	Leu	Leu	Glu	Trp	Glu	Arg	Leu	Gly	Arg	Ser	Cys	Val	Gly
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Trp	Val	Thr	Pro	Asn	Leu	Lys	Asn	Pro	Leu	Arg	His	Met	Trp	Leu	Pro
			20				25						30		
Ser	Ser	Thr	Phe	Ile	Ala	Ser	Phe	Arg	Leu	Asp	Ala	Gly	Lys	Gly	Gly
			35				40					45			
Leu	Gly	Gly	Gln	Arg	Glu	Leu	Leu	Phe	Ile	Gln	Glu	Leu	Cys	Tyr	Thr
			50				55				60				
Ser	His	Phe	Thr	Cys	Ala	Thr	Cys	Ser	Gly	Leu	Asn	Cys	Ala	Ser	Pro
65					70					75				80	
His	Ser	Tyr	Val	Glu	Val	Leu	Thr	Leu	Thr	Thr	Ser	Glu	Trp	Asp	Val
				85					90					95	
Ile	Trp	Lys	Lys												
			100												

<210> 1643

<211> 494

<212> DNA

<213> Homo sapiens

<400> 1643

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 120
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgtcctc
 180
 ctgcttggtg ccaggatata agaaaggagg ggcacacact gtgggggaac tctgggggtc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgtct
 300
 cagcccatcg ctcacagccc tataagtgcg cgatggcacc ctatatcacc taagcggggc
 360
 tgtgcctcct gaggcttttag ggacaccaga atgagccccc ctggcgaggag tctggctctg
 420

ggtgtgtgga gatgccacct gggacgggaa cccaggtgc atggagcccc actgcagaca
 480
 ccataccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
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 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
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 aggagccggt ctctgaaaca cgtggccctt ggaagggaact tcaacgttgc gtgcaaggag
 120
 acccttgagc atgtcctgca tcgcatagcc cagctaagtc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcggttg aagcagggtg coagcatcct gatccggggt
 240
 ttggggacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 gggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

```

          20          25          30
Asn Phe Asn Val Arg Cys Lys Glu Thr Leu Asp Asp Val Leu His Arg
   35          40          45
Ile Ala Gln Leu Met Gln Asp Asp Cys Pro Leu Gln Ser Leu Ser
   50          55          60
Val Ala Glu Ser Arg Leu Lys Gln Gly Ala Ser Ile Leu Ile Arg Ala
  65          70          75          80
Leu Gly Thr Asn Pro Lys Leu Thr Ala Leu Asp Ile Ser Gly Asn Ala
   85          90          95
Ile Gly Asp Ala Gly Ala Lys Met Leu Ala Lys Ala Leu Arg
  100          105          110

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<210> 1647

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1647

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gtaccggagg ctcgggctcc accgaccctc cteccacccc cteccactca cctctggggc
 120
cgcgactcgc cagggcgggg cgggccgaac catggggcgc ggtgtgggct aagctgggtg
 180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
 240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
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gccacatctg tcccatcgg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacatc
 360
agtccaagtg gcacagagct gtcttccttg gagcaaaccc ggagctacct cctcagcgat
 420
gggacctgca agtgcggtct ggagtggtcca cttaatgtcc ccaagggttt caactttgac
 480
cctttggccc cggtgacccc g
501

```

<210> 1648

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1648

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Met Asn Gly Gly Asn Glu Ser Ser Gly Ala Asp Arg Ala Gly Gly Pro
 1          5          10          15
Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
 20          25          30
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
 35          40          45
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
 50          55          60
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
 65          70          75          80
Pro Val Thr Pro

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<210> 1649
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1649
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 60
 accaactcac gggtgtcgcg catcttctcc aacaagggtga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcacg gatcagatcg ttctgtatct cgcaccgccc
 180
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tccggccccgt cggcggcggt
 240
 aaatcgtccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggtctgc cggctcttoga gtcgccctcg ggggtgttca acgccactga agacggcgcg
 360
 atccctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccctgg
 420
 gcgaccaagc gcctggcgga a
 441

<210> 1650
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1650
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
 1 5 10 15
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
 20 25 30
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
 35 40 45
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
 50 55 60
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
 65 70 75 80
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
 85 90 95
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
 100 105 110
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
 115 120 125
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
 130 135 140
 Leu Ala Glu
 145

<210> 1651
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

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 cgccgcgagc tttccgaacg cctcgaggat tacgcgcgac aaacttccat ggtgcgttcc
 120
 gtacactccc tcgcattcgc gttgctgcgc acacggcgccg agggaggagct gcgccttatt
 180
 accggctgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
 240
 catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
 300
 ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
 360
 ctccggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
 408

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

Xaa	Ala	Asp	Pro	Ser	Gly	Ile	Leu	Val	Ile	Ala	Pro	Ser	Lys	Glu	Ser
1				5					10					15	
Gly	Ala	Arg	Leu	Arg	Arg	Glu	Leu	Ser	Glu	Arg	Leu	Glu	Asp	Tyr	Ala
			20					25					30		
Ala	Gln	Thr	Ser	Met	Val	Arg	Ser	Val	His	Ser	Leu	Ala	Phe	Ala	Leu
			35				40					45			
Leu	Arg	Thr	Ala	Ala	Glu	Glu	Glu	Leu	Arg	Leu	Ile	Thr	Gly	Ala	Asp
	50					55				60					
Xaa	Asp	Ala	Val	Ile	Arg	Glu	Leu	Leu	Thr	Gly	Gln	Ala	Glu	Asp	Gly
	65					70			75					80	
His	Gly	Ser	Trp	Pro	Ala	Glu	Met	Arg	Pro	Ala	Trp	Asn	Xaa	Cys	Gly
			85					90						95	
Leu	Ser	Arg	Gln	Leu	Arg	Asp	Phe	Leu	Leu	Arg	Ser	Ile	Glu	Arg	Gly
		100						105					110		
Leu	Gly	Pro	Gly	Asp	Leu	Glu	Ser	Leu	Gly	Ala	Glu	His	Gly	Arg	Pro
		115					120						125		
Met	Trp	Ser	Ala	Ala	Gly	Glu	Phe								
		130					135								

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

ccagctcttc tccgaccgcg tccctcttcc ggccatacgg cacccaatgt cgcgtcacca
 60
 tcaccgcgcg acatggccat cgctccacgg gacgagttga gtgacaagat ccggtgcatt
 120

ctgcgcaccc ttgaacctgg tgacagtgtg aaggagatcc tcaacacgtc gcgtgtcgctc
 180
 ggcatctgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcatgctcct tgatcgtggc ggccgggtgctc gcacagggtgg cacaagcagc cacaccogtg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro Ala Ser Leu Arg Pro Arg Pro Ser Ser Gly His Thr Ala Pro Asn
 1 5 10 15
 Val Ala Ser Pro Ser Pro Ala His Met Ala Ile Ala Pro Pro Asp Glu
 20 25 30
 Leu Ser Asp Lys Ile Arg Cys Ile Leu Arg Thr Leu Glu Pro Gly Asp
 35 40 45
 Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val
 50 55 60
 Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp
 65 70 75 80
 Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala
 85 90 95
 Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln
 100 105 110
 Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu
 115 120 125
 Arg Leu Cys Leu
 130

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

nccctgacct gacctgtcct cgccatggcc gaggcgcct ccggcgccgg gggcacgtcc
 60
 ctggagggggc agcgtggcaa gaggcccccg ccggaggggc agcctgcagc ccggcgctcc
 120
 ggagttctctg ataagctttt cggaagcggc ctctctcagg ctggctcgta cctgggtgctc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat garcttccca
 240
 gacacgaccg atgaccacac gctgctatgg etgctgaacc acatccgcgt gggcattccc
 300
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc
 360

gccacgtatg agagcctact ccgagggggc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcggggggcac ccgcggcttc tcctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaaacgcc agagcatcat ccgccttctgg
 540
 ctgcagaatt tgcgtgcaa gcaggaggaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccgagctt ggcagcacgt gggatcatcc agcagggtgt cctgtccac
 660
 gagcagcgta ttctgaacgc cctcatgaag tcatgggtgc aggcgcgtgt tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgectggctg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttgc ggtctgtcct gtacacatcc
 840
 acagaggctg atcagacaag ccgggatggt tcctgcgtgg tctttgccct cttcaacgtg
 900
 atctggtcga cgctgttcct ataggaaatgg aagcgtatag gggctgagct gggatataat
 960
 tggggagcgc tggactcatc ctgggaagcc gtggaggagc cagcggccca gttcagggtg
 1020
 gtgcgacgta tcatcccat cactcggggc gaggagtctt actaccgcgc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met Ala Glu Ala Ala Ser Gly Ala Gly Gly Thr Ser Leu Glu Gly Glu
 1 5 10 15
 Arg Gly Lys Arg Pro Pro Pro Glu Gly Glu Pro Ala Ala Pro Ala Ser
 20 25 30
 Gly Val Leu Asp Lys Leu Phe Gly Lys Arg Leu Leu Gln Ala Gly Arg
 35 40 45
 Tyr Leu Val Ser His Lys Ala Trp Met Lys Thr Val Pro Thr Glu Asn
 50 55 60
 Cys Asp Val Leu Met Thr Phe Pro Asp Thr Thr Asp Asp His Thr Leu
 65 70 75 80
 Leu Trp Leu Leu Asn His Ile Arg Val Gly Ile Pro Glu Leu Ile Val
 85 90 95
 Gln Val Arg His His Arg His Thr Arg Ala Tyr Ala Phe Phe Val Thr
 100 105 110
 Ala Thr Tyr Glu Ser Leu Leu Arg Gly Ala Asp Glu Leu Gly Leu Arg
 115 120 125
 Lys Ala Val Lys Ala Glu Phe Gly Gly Gly Thr Arg Gly Phe Ser Cys
 130 135 140
 Glu Glu Asp Phe Ile Tyr Glu Asn Val Glu Ser Glu Leu Arg Phe Phe
 145 150 155 160
 Thr Ser Gln Glu Arg Gln Ser Ile Ile Arg Phe Trp Leu Gln Asn Leu

```

          165              170              175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
          180              185              190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
          195              200              205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
          210              215              220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
          225              230              235
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
          245              250              255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
          260              265              270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
          275              280              285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
          290              295

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<210> 1657

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1657

```

tgtagaggct cgaggtcatc cggaccatgt ggtccaggac gccccgctcc tccgggcccc
60
gcacggagac gcggcgctcag caccgacagc acgcagctctg tgagcctctg caggcagttc
120
ttggagcccg cgggcttccc gcgccgcttc agggggcggg cggcagctcg gggcggtact
180
tctccaaaaa ctgctccggg cagggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcgcgcacat tccacggcgg gggtaacctc
300
gcgtggacat ccgccctgc tagcatcagg gct
333

```

<210> 1658

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1658

```

Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
1      5      10      15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
20     25     30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
35     40     45
Glu Val Pro Ala Arg Ala Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
50     55     60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65     70     75     80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```



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      85                      90                      95
Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
      100                      105

<210> 1659
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1659
nnaagcttat ttgttattac taatatatttc cgtgaccaga tgggccgcta tggtgagatt
60
tacacaactt acaagatgat tttggatgct attcgttaagg tgcctactgc cactgttctc
120
cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
180
ggttttgact tggagaaaagg cccagcccaa ctggctcact ataataccga aggaattctc
240
tgtcccgcact gccaggcat cctcaaatat gagcataata cctatgcmaa ctggggcgcc
300
tatatctgtg aagactgtgg atgtaaacgt cctgatctcg actatcgctt gacagaactg
360
gttgagttaa ccaacaatcg cn
382

<210> 1660
<211> 127
<212> PRT
<213> Homo sapiens

<400> 1660
Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
1 5 10 15
Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
20 25 30
Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
35 40 45
Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
50 55 60
Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
65 70 75 80
Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
85 90 95
Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
100 105 110
Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
115 120 125

<210> 1661
<211> 524
<212> DNA
<213> Homo sapiens

<400> 1661

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acgcgtcgat gatcatggag aagacgcggg ccgctcctt gcctgtgacc ttcttgtaca
 60
 gctgcgggta gtagagctcc aggcctctga ggaaggccac gtagcccttg tggccgggtcc
 120
 gctgcaggat gtccaggagc acaccacatt tccgtttgog gatgaccagg ttgggggtgc
 180
 tgagcacctg ctctcatca tcagggttca ggaccttga ctgccgcagg taagggtgtga
 240
 tgcgtgaggg gtccgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc
 300
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgggggc
 360
 agtgctgaga gcgatgccgg ctctgcccc caccggggcc cagctccac tccttctcag
 420
 acgctggggc agggctctcg tcagggtcag gagggggatc agccaggcg catccaggag
 480
 aggtgcccag ctccgtgtcc catccacgc ttgatcgtg catg
 524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25					30		
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
			35					40					45		
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
			50			55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
					70				75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85					90						95	
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
			100					105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
			115			120						125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
			130			135				140					
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
				150						155				160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
				165					170						

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc
 60
 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag
 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaaggt cattggatcg
 240
 acgactttct tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10				15		
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
		20						25				30			
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35				40					45				
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50					55				60					
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
	65			70				75						80	
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90					95		
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
		100						105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttcggaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcccgacta tctccgggtg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgratcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctgtt gatttgggtg tgctcgacgt caaatcgggg
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcggtgc aacctaccat cgattttggt
 300
 gatcgtctca cgcgctcgg taaagaaate tggattcggt tcggtgtggt ccccgatatac
 360
 accgactcgg tagagaacgt gaaaaagggt gccgatatac tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Arg Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
tccgctgaga ccagcggttg tgacttccca ggtgagactg tccgcacccat ggccaagatc
60
gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgtgg cctttaccaa gtccgggtgac accgccgcgc gtatcgctcg tctgctgcg
240
agcaccgccg tcactgtttt cacctctgat gagaccacga ccaagaccct cgcctgggctc
300
tggggcgctc acgccgtcgt taccgccggt ttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

```

Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1             5             10             15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
      20             25             30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
      35             40             45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
      50             55             60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
      65             70             75             80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
      85             90             95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
      100            105            110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
      115            120

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<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

```

ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
 60
cgaaaactec acccccttct caaacgagtt attctagct cgcgccccag tccttgccct
120
tcccagcctt ggtggtaatt agcttgaag tggaacagag agtgcggtcc gcaagaaaaa
180
gactttctggt tagacactga aatacaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgccttct cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gtcgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaatatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaag agaagcctca
540
aggagttccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttttgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtggg ctcgaaacacc aacgcgttct
720
tcaaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgtat
780
aaacgcagac tgaaaaaatca aatggcagga cgtgggaact gtcgtcaagg ttctcagact
840
tgtggtcttc gcacctgtta tacttttggg tacgagttag ctccacttag cttcgttaag
900

```

```

attagaaatt tccatgaaac acttaccac atataaatc tgtgtaaagc tttatTTTT
960
tccccaccta cttaaatTTT ttttaaaaag tgaataaga ggaataaactc ttataaaata
1020
taaggTTTaa catacgagag agcgagggaac accccggagg ctgccggtgc gtgtggcttc
1080
atgtttctgt gctacatgag tctagtgtcc tcattctcca ttgtgacaac cttctcccc
1140
ccatcacact gtcaatgagc tctaggcaaa gctgcccggt ttgctTTTaa cctaagggat
1200
gctgtgggtt gggtgactac atttgactac caccactgaa ggcgccggac gtctgaagcg
1260
gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca
1320
ggTcaaggTc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
1380
ttcgtaaaggc acctcggtct ggcatcggga aaaccacccc atcttgccag agtcccttgg
1440
tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a
1491

```

```

<210> 1670
<211> 132
<212> PRT
<213> Homo sapiens

```

```

<400> 1670
Met Pro Asp Trp Phe Phe Pro Phe Leu Ala Pro Ser Thr Ser Cys His
1 5 10 15
Asp Ser Pro Ser Glu Asn Thr Ala Pro Pro Leu Pro Phe Ser Val Met
20 25 30
Ser Ile Cys Ser Thr Pro Gln Pro Leu Ser Arg Ala Gln Val Leu Val
35 40 45
Ala Glu Gly Lys Ala Val Phe Glu Gly Leu Ser Lys Lys Glu Asp Gly
50 55 60
Ala Ala Leu Pro Arg Ala Arg Trp Gln Ser Val Cys Ile Ser Val Ser
65 70 75 80
Asn Gln Lys Ser Phe Leu Cys Gly Pro His Ser Arg Ser His Phe Gln
85 90 95
Ala Asn Tyr His Gln Gly Trp Glu Arg Gln Gly Leu Gly Ala Glu Leu
100 105 110
Gly Ile Thr Arg Leu Arg Arg Gly Trp Ser Phe Arg Cys Ser Phe Pro
115 120 125
Cys Ser Val Leu
130

```

```

<210> 1671
<211> 432
<212> DNA
<213> Homo sapiens

```

```

<400> 1671
gcgcgccgg gcggggaggac gccagtcgtc ttccgcgcc tcaccacgac acgaccatta
60

```

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
 120
 gcaccccgca tgaagccggt gtcgcggtc ggggacacga ttttcgctgg cgcctcgtcg
 180
 gtatttgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttctc catgaagacg
 240
 gcagccccga cgttggtggc taacaccgat aactttttca cgtccccggc ttggacaacg
 300
 gatcagaacc cgccggcctt tggatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag
 420
 ctgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25				30			
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35				40					45				
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50				55					60					
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65				70					75					80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
		85						90					95		
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
		100					105					110			
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115				120					125				
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130					135					140				

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct
 60
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctccagc gtcttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc
 180
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaatcc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactgggtt t
 401

<210> 1674
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1674
 Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe
 1 5 10 15
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Pro Leu Pro
 20 25 30
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Asn Ser Pro
 35 40 45
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala
 50 55 60
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr
 65 70 75 80
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr
 85 90 95
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala
 100 105 110
 Arg
 109

<210> 1675
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1675
 gccggcgac ccacctggga cgtggtgaaa tcggcaaaac tcacctcttt agctacctgc
 60
 gcgccaaccg caggggcagc ctcccacacg cctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcattgtctc aggatacccg tttagccagg aaacaccggt aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcctc cgcactccac
 240
 ccgcacacgc cctgggaacc gtcacccgcg gtaccaccgg gtcaatcggc tccgcaaatg
 300
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcattgcaccg
 420
 atgcagcaac aggcgctccg ctgcctatcg atctgggata cggcgccgcc ccttggaacca
 480
 ctgttgagat ggctacgcgt
 500

<210> 1676

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1676

```

Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
 1             5             10             15
Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20             25             30
Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35             40             45
Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50             55             60
Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65             70             75             80
Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85             90             95

```

Arg

<210> 1677

<211> 631

<212> DNA

<213> Homo sapiens

<400> 1677

```

nntcatgatt tcctcaatga tgccaagggt atggaggccg gctataacctg ggtgcagggtg
60
gatttcgcgc gtacgggtgc ttctactggg tgtttgngac tggaatggtc cnnccggggag
120
cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtag agccgtggtc gaatggtcgg
180
gtggggcttt tcggtaaata ctacgatggg gggacggggg ctatttgcctg caggtaataca
240
gccgcggggg ttggctgctg ttgtggcgca ggagccagct atggagccct acattaccct
300
gataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
360
tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtggtcta
420
cgaggtggcc caccgcgcat gcctgtccga caatttgcgt aattcttttag accccatccg
480
tagccacaaa taatggggcg gatcggtctt tccctcacca agacgcataa tttcccccg
540
gccttggttt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga
600
attgttgaag gaccgtaagg ctccgacgcg t
631

```

<210> 1678

<211> 78

<212> PRT

<213> Homo sapiens

<400> 1678

```

Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10          15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
          20          25          30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
          35          40          45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
          50          55          60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
65           70           75

```

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

```

nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttcccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg ttaccaagc cagtgggtcat cttgccgtgc
180
cagcacaacc tgtgccggaa gtgtgccaat gacatcttcc aggtcgcaaa tcctactctg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgtgccc tacctgccgc
300
cacggagtga tcattggtcg tcacggagtg tacggcctgc agaggaacct gctgggtggg
360
aacatcatcg acatctacaa acaggagtg tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

```

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

```

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10          15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
          20          25          30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
          35          40          45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
          50          55          60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

```

65              70              75              80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
      85              90              95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
      100              105              110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
      115              120              125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
      130              135              140

```

```

<210> 1681
<211> 396
<212> DNA
<213> Homo sapiens

```

```

<400> 1681
gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagttttgcc
120
tgtgagggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
caacnctggaa ggagtcgggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctgggtccgtt acaagaagga gccttcctggg tgccccgtgt gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc caccggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttccg cgtggatgtg ctcagg
396

```

```

<210> 1682
<211> 132
<212> PRT
<213> Homo sapiens

```

```

<400> 1682
Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
1              5              10              15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
      20              25              30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
      35              40              45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
      50              55              60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65              70              75              80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
      85              90              95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
      100              105              110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
      115              120              125
Asp Val Leu Arg

```

130

<210> 1683

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1683

nncggccgga caggtcccgga gcagcccccgc ccaacatgga cccagacccc caggcgggag
 60
 tgcaggtggg catgcgggtg gtgcgcggcg tggaccgaa gtggggccag caggacggcg
 120
 gcgagggcgg cgtggggcac gtggtggagc ttggccgcca cggcagcccc tcgacacccg
 180
 accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
 240
 agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgctcgg caccccaaca
 300
 tcattctgtg ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
 360
 gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgcgccacc
 420
 ccttcgacgg ctacgagacc gctcactcgc gccctgtcac actgagtcgc cgccaggggc
 480
 tcccagggat cccactaagg ggcattcttc agggagcgaa ggtggtgcga gggcccgact
 540
 gggagtgggg etcacaggat ggtgagtgga ggcagagggg cggggtcagg gctggcgtgt
 600
 ggctggctca tggctcagcc ttgacctgct gggggggcct ctttccccag gagggaaagg
 660
 aaaccgggac gccgga
 676

<210> 1684

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1684

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
 1 5 10 15
 Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
 20 25 30
 Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
 35 40 45
 Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
 50 55 60
 Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
 65 70 75 80
 Arg Ala Arg Thr Thr Cys Cys Thr Thr Pro Arg Ser Ala Ser
 85 90 95
 Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
 100 105 110
 Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

	115		120		125
Ser	Ala Thr Cys Thr Thr	Ser Met Ser Ser Pro	Thr Pro Ser Thr Ala		
	130	135	140		
Thr	Arg Pro Leu Thr Arg	Ala Leu Ser His			
145	150				

<210> 1685
 <211> 2740
 <212> DNA
 <213> Homo sapiens

<400> 1685
 ngaggaggag ccggcgccg ctccggggaa agggagggg gcgctccgca gccgcgccc
 60
 cccaggggct ggcgaggga aggcgtacgc gctcagcaga ggggcggcag cggcggggag
 120
 gggggcctccc cttctccatc ctctctttct gcggggcaaaa ccccaggaa cggcagcaga
 180
 aactccgaa gcggcggtgc ggggggcggc agcgggtggtg gagggagcta ctggaaagaa
 240
 ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggacgcggcg
 300
 gcggccgcgg ctccagatgca cgctaagaac ggccggcggc gcagtagcgc cagctccccg
 360
 gtgtcttgcc cccctgcgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
 420
 gcggcgccgg agggccccc gcagagcgcga gagggcagcg cgagcggcgg gggcatgcag
 480
 gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
 540
 caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
 600
 ctgagaaccg agatggacga gatgaggac actttctctc aggaggatgc ctgtcaactg
 660
 caggaaatgc gccacgagtt ggagagagcc aacaaaaat gccggatcct gcagtagcgc
 720
 ctccgcaag ccgagcgcaa aaggctccgc tacgcccaga ccgggaaat cgacggggag
 780
 ctgttgccga ccctggagca ggacctcaag gttgcaaaag atgtatctgt gagacttcac
 840
 catgaattag aaaaatgtga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
 900
 aggcacaacgc tcatagaagt tgaatttgca aagcaagctt tacagaatga actggaaaaa
 960
 atgaaagagt tatccttaa aagaagagga agcaaaagatt tgccaaaaatc tgaaaaaaag
 1020
 gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttgtt
 1080
 aaggagaag ccgctttgat gagaagaaa atggccaaga ttgataaaga aaaggacaga
 1140
 tttgaacacg agctccagaa gtacagatcc ttttatggg atctggacag tcctttgcc
 1200
 aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaag
 1260

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
 1320
 agaggcctga aggcggaact ggacgacctt agggggcgatg acnnttcaac ggctcggcca
 1380
 acccgctcat gaggggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg
 1440
 gtggaagacg agacggagct gctcgggagg aacgtggccg acctggaggga gcagaacaag
 1500
 cgcatacagg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc
 1560
 ggcaaccaga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgcctg
 1620
 cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg
 1680
 tccaacatgc agcgcctacga cctggcctcg caacctgggca tccgcggcag ccccgcgac
 1740
 agcgacgccc agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctcgcgac
 1800
 cgcaagcgcg aaggggcccat cggcggcgag agcgactcgg aggaggtggn gcgaacatcc
 1860
 gctgcctcan cgcccactcg ctcttctac cggcgcccg ggccctggcc caagagcttc
 1920
 tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgccctgg caagaccatc
 1980
 gacgggtca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa
 2040
 cggggacctg tnnccgact catggacgag gaggacgacg gcagccgcat ccgggagcac
 2100
 gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc
 2160
 atcgaccgcc tcgagggtgcc caagtctgcy gacgaccgcy gcgccgagga gcccatcttc
 2220
 gtgagtcaga tgttccagcc tatcatttta cttattctca ttcttgatt attttcatca
 2280
 cttttctaca caacaatatt taaacttgte ttcttttta cactgtttt tgtactgtaa
 2340
 atctttcacc atttaccatt cattgtagta ttttcagttt gtttattttg ttacccttc
 2400
 aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag
 2460
 actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaatc aataagaagc
 2520
 ccaaacacta aaatatctca ggtaagaag tgtgacattt ttctgtatga attgttttaa
 2580
 tttttacttc ttttttcat cctgtttgtc tcctcttgat aaataattgg catactgaat
 2640
 ataaaaatgg actacatgtc tcataattat ttctcagtag ttactatta ttattcaaaa
 2700
 gctggacgga cattcacaat ttggtcacat ttccaaaaa
 2740

<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1 5 10 15
 Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
 20 25 30
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

              405              410              415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
              420              425              430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
              435              440              445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
              450              455              460

```

<210> 1687

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1687

```

gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg tacccagtcg
60
ggctcgtctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ctcagagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccttgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

<210> 1688

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1688

```

Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1              5              10              15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
              20              25              30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
              35              40              45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Val Arg Ser Gln Ala Asn
              50              55              60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65              70              75              80
Phe Glu Gln His Arg Thr Arg Val Pro
85

```

<210> 1689

<211> 301

<212> DNA

<213> Homo sapiens

<400> 1689

```

nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60

```


tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
 120
 ttggcctttt cccagtcctat taagcctaaa caaaccacat cactttacat caggcagatc
 180
 atgtggtacc agaattttcc agtttgccgg actatcttga tcaaatcaac taaattattg
 240
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc
 300
 a
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met His Cys Gln Leu Gly Asp Val Leu Ile Trp Ser Gly Ile Leu His
 1 5 10 15
 Leu Val Ile Ala Asp Asn Thr His Val Ala Pro Arg Lys Lys Lys Leu
 20 25 30
 Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile
 35 40 45
 Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu
 50 55 60
 Ile Lys Ser Thr Lys Leu Leu Pro Leu Trp Leu Ser Val Lys Glu His
 65 70 75 80
 Asn Glu Glu Asn Leu Glu Pro Tyr Leu Ile Leu
 85 90

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

nacgcgttcc ggtatgccga tgggcccgtg ctgctggggc tccgccggcg gcgcggtgag
 60
 ttgtgccttg aagtgtggga ccgcggccccc ggcattcctc aagacaaaca aaagtcatcc
 120
 ttcgaagaat tcaaacgcct ggacagtcac cagaccccgcg ccgagaaaagg cctgggcctg
 180
 ggcctggcga ttgccgacgg ctgtgtgcgc gtgctcgggc atcgcttgag cgtgcgttcg
 240
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggctcagc
 300
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
 420
 gaagctctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggctga ggggtgtggg
 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg
 1 5 10 15
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
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<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
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<400> 1694

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Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
  50             55             60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
  65             70             75             80
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 1696

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  35             40             45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

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Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100             105             110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65      70      75      80
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<211> 442

<212> DNA

<213> Homo sapiens

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<210> 1700

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1700

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 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly
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 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr
 65 70 75 80
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met
 85 90 95
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu
 100 105 110
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile
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 Asn Gly Arg
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<210> 1701

<211> 8265

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Gly	Arg	Thr	Leu	Arg	Glu	Gln	Gly	Val	Glu	Glu	His	Glu	Thr	Leu	Leu
			180					185					190		
Leu	Arg	Arg	Lys	Phe	Phe	Tyr	Ser	Asp	Gln	Asn	Val	Asp	Ser	Arg	Asp
			195			200						205			
Pro	Val	Gln	Leu	Asn	Leu	Leu	Tyr	Val	Gln	Ala	Arg	Asp	Asp	Ile	Leu
			210			215						220			
Asn	Gly	Ser	His	Pro	Val	Ser	Phe	Asp	Lys	Ala	Cys	Glu	Phe	Ala	Gly
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Phe	Gln	Cys	Gln	Ile	Gln	Phe	Gly	Pro	His	Asn	Glu	Gln	Lys	His	Lys
				245				250						255	
Ala	Gly	Phe	Leu	Asp	Leu	Lys	Asp	Phe	Leu	Pro	Lys	Glu	Tyr	Val	Lys
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Gln	Lys	Gly	Glu	Arg	Lys	Ile	Phe	Gln	Ala	His	Lys	Asn	Cys	Gly	Gln
			275			280						285			
Met	Ser	Glu	Ile	Glu	Ala	Lys	Val	Arg	Tyr	Val	Lys	Leu	Ala	Arg	Ser
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Leu	Lys	Thr	Tyr	Gly	Val	Ser	Phe	Phe	Leu	Val	Lys	Glu	Lys	Met	Lys

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Gly	Lys	Asn	Lys	Leu	Val	Pro	Arg	Leu	Leu	Gly	Ile	Thr	Lys	Glu	Cys		
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Val	Met	Arg	Val	Asp	Glu	Lys	Thr	Lys	Glu	Val	Ile	Gln	Glu	Trp	Asn		
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Leu	Thr	Asn	Ile	Lys	Arg	Trp	Ala	Ala	Ser	Pro	Lys	Ser	Phe	Thr	Leu		
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Asp	Phe	Gly	Asp	Tyr	Gln	Asp	Gly	Tyr	Tyr	Ser	Val	Gln	Thr	Thr	Glu		
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Gly	Glu	Gln	Ile	Ala	Gln	Leu	Ile	Ala	Gly	Tyr	Ile	Asp	Ile	Ile	Leu		
		385				390				395					400		
Lys	Lys	Lys	Lys	Ser	Lys	Asp	His	Phe	Gly	Leu	Glu	Gly	Asp	Glu	Glu		
				405					410						415		
Ser	Thr	Met	Leu	Glu	Asp	Ser	Val	Ser	Pro	Lys	Lys	Ser	Thr	Val	Leu		
			420						425					430			
Gln	Gln	Gln	Tyr	Asn	Arg	Val	Gly	Lys	Val	Glu	His	Gly	Ser	Val	Ala		
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Leu	Pro	Ala	Ile	Met	Arg	Ser	Gly	Ala	Ser	Gly	Pro	Glu	Asn	Phe	Gln		
			450				455					460					
Val	Gly	Ser	Met	Pro	Pro	Ala	Gln	Gln	Gln	Ile	Thr	Ser	Gly	Gln	Met		
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His	Arg	Gly	His	Met	Pro	Pro	Leu	Thr	Ser	Ala	Gln	Gln	Ala	Leu	Thr		
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Gly	Thr	Ile	Asn	Ser	Ser	Met	Gln	Ala	Val	Gln	Ala	Gln	Ala	Thr			
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Leu	Asp	Asp	Phe	Asp	Thr	Leu	Pro	Pro	Leu	Gly	Gln	Asp	Ala	Ala	Ser		
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Lys	Ala	Trp	Arg	Lys	Asn	Lys	Met	Asp	Glu	Ser	Lys	His	Glu	Ile	His		
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Ser	Gln	Val	Asp	Ala	Ile	Thr	Ala	Gly	Thr	Ala	Ser	Val	Val	Asn	Leu		
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Thr	Ala	Gly	Asp	Pro	Ala	Glu	Thr	Asp	Tyr	Thr	Ala	Val	Gly	Cys	Ala		
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Ser	Ala	Gln	Pro	Ala	Ser	Ala	Glu	Pro	Arg	Gln	Asn	Leu	Leu	Gln	Ala		
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740										745										750									
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Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly														
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Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys														
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Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ser	Ala															
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Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala														
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Glu	Gln	Ile	Pro	Leu	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln														
965										970										975									
Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser														
980										985										990									
Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val														
995										1000										1005									
Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala														
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Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys														
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Ala	Gln	Glu	Ala	Cys	Gly	Pro	Leu	Glu	Met	Asp	Ser	Ala	Leu	Ser	Val														
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Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg														
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Gln	Asp	Leu	Gly	Asn	Ser	Thr	Lys	Ala	Val	Ser	Ser	Ala	Ile	Ala	Gln														
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Leu	Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	Ala														
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Ala	Arg	Asp	Val	Ala	Gly	Gly	Leu	Arg	Ser	Leu	Ala	Gln	Ala	Ala	Arg														
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Gly	Val	Ala	Ala	Leu	Thr	Ser	Asp	Pro	Ala	Val	Gln	Ala	Ile	Val	Leu														
114																													

1170 1175 1180
 Leu Ala Gln Val Ala Lys Ala Val Thr Gln Ala Leu Asn Arg Cys Val
 1185 1190 1195 1200
 Ser Cys Leu Pro Gly Gln Arg Asp Val Asp Asn Ala Leu Arg Ala Val
 1205 1210 1215
 Gly Asp Ala Ser Lys Arg Leu Leu Ser Asp Ser Leu Pro Pro Ser Thr
 1220 1225 1230
 Gly Thr Phe Gln Glu Ala Gln Ser Arg Leu Asn Glu Ala Ala Ala Gly
 1235 1240 1245
 Leu Asn Gln Ala Ala Thr Glu Leu Val Gln Ala Ser Arg Gly Thr Pro
 1250 1255 1260
 Gln Asp Leu Ala Arg Ala Ser Gly Arg Phe Gly Gln Asp Phe Ser Thr
 1265 1270 1275 1280
 Phe Leu Glu Ala Gly Val Glu Met Ala Gly Gln Ala Pro Ser Gln Glu
 1285 1290 1295
 Asp Arg Ala Gln Val Val Ser Asn Leu Lys Gly Ile Ser Met Ser Ser
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 Ser Lys Leu Leu Leu Ala Ala Lys Ala Leu Ser Thr Asp Pro Ala Ala
 1315 1320 1325
 Pro Asn Leu Lys Ser Gln Leu Ala Ala Ala Arg Ala Val Thr Asp
 1330 1335 1340
 Ser Ile Asn Gln Leu Ile Thr Met Cys Thr Gln Gln Ala Pro Gly Gln
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 Lys Glu Cys Asp Asn Ala Leu Arg Glu Leu Glu Thr Val Arg Glu Leu
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 1380 1385 1390
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 Ala Gln Ala Ala Tyr Leu Val Gly Val Ser Asp Pro Asn Ser Gln Ala
 1445 1450 1455
 Gly Gln Gln Gly Leu Val Glu Pro Thr Gln Phe Ala Arg Ala Asn Gln
 1460 1465 1470
 Ala Ile Gln Met Ala Cys Gln Ser Leu Gly Glu Pro Gly Cys Thr Gln
 1475 1480 1485
 Ala Gln Val Leu Ser Ala Ala Thr Ile Val Ala Lys His Thr Ser Ala
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 Ala Lys Arg Gln Phe Val Gln Ser Ala Lys Glu Val Ala Asn Ser Thr
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 Ala Asn Leu Val Lys Thr Ile Lys Ala Leu Asp Gly Ala Phe Thr Glu
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 Glu Asn Arg Ala Gln Cys Arg Ala Ala Thr Ala Pro Leu Leu Glu Ala
 1555 1560 1565
 Val Asp Asn Leu Ser Ala Phe Ala Ser Asn Pro Glu Phe Ser Ser Ile
 1570 1575 1580
 Pro Ala Gln Ile Ser Pro Glu Gly Arg Ala Ala Met Glu Pro Ile Val
 1585 1590 1595 1600
 Ile Ser Ala Lys Thr Met Leu Glu Ser Ala Gly Gly Leu Ile Gln Thr

1605 1610 1615
 Ala Arg Ala Leu Ala Val Asn Pro Arg Asp Pro Pro Ser Trp Ser Val
 1620 1625 1630
 Leu Ala Gly His Ser Arg Thr Val Ser Asp Ser Ile Lys Lys Leu Ile
 1635 1640 1645
 Thr Ser Met Arg Asp Lys Ala Pro Gly Gln Leu Glu Cys Glu Thr Ala
 1650 1655 1660
 Ile Ala Ala Leu Asn Ser Cys Leu Arg Asp Leu Asp Gln Ala Ser Leu
 1665 1670 1675 1680
 Ala Ala Val Ser Gln Gln Leu Ala Pro Arg Glu Gly Ile Ser Gln Glu
 1685 1690 1695
 Ala Leu His Thr Gln Met Leu Thr Ala Val Gln Glu Ile Ser His Leu
 1700 1705 1710
 Ile Glu Pro Leu Ala Asn Ala Ala Arg Ala Glu Ala Ser Gln Leu Gly
 1715 1720 1725
 His Lys Val Ser Gln Met Ala Gln Tyr Phe Glu Pro Leu Thr Leu Ala
 1730 1735 1740
 Ala Val Gly Ala Ala Ser Lys Thr Leu Ser His Pro Gln Gln Met Ala
 1745 1750 1755 1760
 Leu Leu Asp Gln Thr Lys Thr Leu Ala Glu Ser Ala Leu Gln Leu Leu
 1765 1770 1775
 Tyr Thr Ala Lys Glu Ala Gly Gly Asn Pro Lys Gln Ala Ala His Thr
 1780 1785 1790
 Gln Glu Ala Leu Glu Glu Ala Val Gln Met Met Thr Glu Ala Val Glu
 1795 1800 1805
 Asp Leu Thr Thr Thr Leu Asn Glu Ala Ala Ser Ala Ala Gly Val Val
 1810 1815 1820
 Gly Gly Met Val Asp Ser Ile Thr Gln Ala Ile Asn Gln Leu Asp Glu
 1825 1830 1835 1840
 Gly Pro Met Gly Glu Pro Glu Gly Ser Phe Val Asp Tyr Gln Thr Thr
 1845 1850 1855
 Met Val Arg Thr Ala Lys Ala Ile Ala Val Thr Val Gln Glu Met Val
 1860 1865 1870
 Thr Lys Ser Asn Thr Ser Pro Glu Glu Leu Gly Pro Leu Ala Asn Gln
 1875 1880 1885
 Leu Thr Ser Asp Tyr Gly Arg Leu Ala Ser Glu Ala Lys Pro Ala Ala
 1890 1895 1900
 Val Ala Ala Glu Asn Glu Glu Ile Gly Ser His Ile Lys His Arg Val
 1905 1910 1915 1920
 Gln Glu Leu Gly His Gly Cys Ala Ala Leu Val Thr Lys Ala Gly Ala
 1925 1930 1935
 Leu Gln Cys Ser Pro Ser Asp Ala Tyr Thr Lys Lys Glu Leu Ile Glu
 1940 1945 1950
 Cys Ala Arg Arg Val Ser Glu Lys Val Ser His Val Leu Ala Ala Leu
 1955 1960 1965
 Gln Ala Gly Asn Arg Gly Thr Gln Ala Cys Ile Thr Ala Ala Ser Ala
 1970 1975 1980
 Val Ser Gly Ile Ile Ala Asp Leu Asp Thr Thr Ile Met Phe Ala Thr
 1985 1990 1995 2000
 Ala Gly Thr Leu Asn Arg Glu Gly Thr Glu Thr Ser Ala Asp His Arg
 2005 2010 2015
 Glu Gly Ile Leu Lys Thr Ala Lys Val Leu Val Glu Asp Thr Lys Val
 2020 2025 2030
 Leu Val Gln Asn Ala Ala Gly Ser Gln Glu Lys Leu Ala Gln Ala Ala

2035					2040					2045				
Gln Ser Ser Val Ala Thr	Ile Thr Arg Leu Ala Asp Val Val Lys Leu													
2050	2055	2060												
Gly Ala Ala Ser Leu Gly Ala Glu Asp Pro Glu Thr Gln Val Val Leu														
2065	2070	2075	2080											
Ile Asn Ala Val Lys Asp Val Ala Lys Ala Leu Gly Asp Leu Ile Ser														
2085	2090	2095												
Ala Thr Lys Ala Ala Ala Gly Lys Val Gly Asp Asp Pro Ala Val Trp														
2100	2105	2110												
Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu														
2115	2120	2125												
Leu Lys Thr Val Lys Ala Val Glu Asp Glu Ala Thr Lys Gly Thr Arg														
2130	2135	2140												
Ala Leu Glu Ala Thr Thr Glu His Ile Arg Gln Glu Leu Ala Val Phe														
2145	2150	2155	2160											
Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile														
2165	2170	2175												
Arg Met Thr Lys Gly Ile Thr Met Ala Thr Ala Lys Ala Val Ala Ala														
2180	2185	2190												
Gly Asn Ser Cys Arg Gln Glu Asp Val Ile Ala Thr Ala Asn Leu Ser														
2195	2200	2205												
Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr														
2210	2215	2220												
His Pro Glu Val Ala Pro Asp Val Arg Leu Arg Ala Leu His Tyr Gly														
2225	2230	2235	2240											
Arg Glu Cys Ala Asn Gly Tyr Leu Glu Leu Leu Asp His Val Leu Leu														
2245	2250	2255												
Thr Leu Gln Lys Pro Ser Pro Glu Leu Lys Gln Gln Leu Thr Gly His														
2260	2265	2270												
Ser Lys Arg Val Ala Gly Ser Val Thr Glu Leu Ile Gln Ala Ala Glu														
2275	2280	2285												
Ala Met Lys Gly Thr Glu Trp Val Asp Pro Glu Asp Pro Thr Val Ile														
2290	2295	2300												
Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ile Glu Ala Ala Ala														
2305	2310	2315	2320											
Lys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Asp														
2325	2330	2335												
Glu Ser Leu Asn Phe Glu Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile														
2340	2345	2350												
Ala Ala Ala Thr Ser Ala Leu Val Lys Ala Ala Ser Ala Ala Gln Arg														
2355	2360	2365												
Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu														
2370	2375	2380												
Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val														
2385	2390	2395	2400											
Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln														
2405	2410	2415												
Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala														
2420	2425	2430												
Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln														
2435	2440	2445												
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2450	2455	2460												
Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Phe														


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2465                2470                2475                2480
Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly
                2485                2490                2495
Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu
                2500                2505                2510
Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln
                2515                2520                2525
Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His
                2530                2535                2540

<210> 1703
<211> 346
<212> DNA
<213> Homo sapiens

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120
tctgctctac ccttctccat gactgctgcc tggctgtgcc tagccttget ctgatccaca
180
ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
240
gactctcctt togcctctgt gaaccagtga tggcgtgaa ctggaggaag aggcagcatg
300
tgaatgactg tgccatccat ggccaaccaag ttccctttct ctgcct
346

<210> 1704
<211> 106
<212> PRT
<213> Homo sapiens

<400> 1704
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His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
20          25          30
Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
35          40          45
Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
50          55          60
Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
65          70          75          80
Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
85          90          95
Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
100          105

<210> 1705
<211> 377
<212> DNA
<213> Homo sapiens

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 120
 ctggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagttta tttaatcctg
 180
 gttttggctg gaacaaaaa ccacaagttc aaaccttgaa gaattctcaa ggttctattc
 240
 ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
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 360
 cttccttcgg agctagc
 377

<210> 1706
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1706
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 35 40 45
 Asn Gln Asn Pro Gln Val Gln Thr Leu Lys Asn Ser Gln Gly Ser Ile
 50 55 60
 His Asn Leu Val Arg Ser Gly Val Thr Val Glu Arg Lys Val Asn Val
 65 70 75 80
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 85 90 95
 Pro Thr Val Pro Pro Tyr Asn Pro Ser Ser Phe Gly Ala Ser
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<210> 1707
 <211> 427
 <212> DNA
 <213> Homo sapiens

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gatattatcg cttccttcgg ggccgacac gtctctctgg cgaccggatc gaggccgct
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 427

<210> 1708
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1708
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 35 40 45
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
 50 55 60
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
 65 70 75 80
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
 85 90 95
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
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 Leu Ala Thr Gly Ser Arg Pro Arg Leu Asp Leu Gly Asp Asp Ala
 115 120 125
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
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<210> 1709
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 1709
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 ctctctctcc agccacatca tatctcagcc tcttgaggag aactcccata gcttgtctct
 180
 tcagtcctcag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaacc
 240
 caggtgtgtg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcagtgtga agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
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 446

<210> 1710

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1710

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 20              25              30
Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35              40              45
Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50              55              60
Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65              70              75              80
Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85              90              95
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115

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<210> 1711

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1711

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120
cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcattc
180
agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
240
ccccatgcac tgcccagtc cagaccacca aagactttgt cctcgccctca cgcacctttt
300
gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaagagact
360
gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat
420
ggatat
426

```

<210> 1712

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1712

```

Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

```

      1           5           10           15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20           25
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35           40           45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50           55           60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65           70           75           80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85           90           95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100           105           110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1713

```

tctagaaagg tttatttcac gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccttggtctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgat aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgctcctgg
180
aatgagcctc actccctccc tgctcaaggc agcccttcac ccagccgccc ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgcctccc ggggcctggg
300
aacgcattct gctggtgact cctggggg
328

```

<210> 1714

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1           5           10           15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20           25           30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35           40           45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50           55           60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65           70           75           80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85           90           95
Ser Gly Trp

```

<210> 1715

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1715

gttgccagcg atgggcccga tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagtcttag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcacga gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt
 240
 aatatgggtgt tttttggcca actcgggaagc cgggggtgtcg gggaaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctgt ccaagggttcg
 360
 aactcattac cgtcgaatac gacgtgtgct ccacggcgcg tgcgaatcg aatcctcaaa
 420
 gtgtatccgt actcgggtgc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716

<211> 101

<212> FRT

<213> Homo sapiens

<400> 1716

Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
 1 5 10 15
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
 20 25 30
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
 35 40 45
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
 50 55 60
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
 65 70 75 80
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
 85 90 95
 Cys Ala Leu Thr Arg
 100

<210> 1717

<211> 312

<212> DNA

<213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtcctgcac ccgatgctc tcttcccca
 120
 aatccccctg gaatacacag agagacataa aaacaaggag tgcctgtag cacagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1			5					10					15		
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
			35				40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
			50			55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Glu	Thr	Arg	Asn	
			65			70			75					80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Met	Trp	Phe	Leu	
				85				90					95		
Leu	Arg	Cys	Met	Pro											
				100											

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgccca ttttttgtcg ggaccgcaga ccgtatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcataaact cgggtcttgc cgggggcaac gtcgtagggt
 120
 ccaacagttt ctccaacctc ataggttagaa gaagtgcctat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagt tctcgtctta
 240
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 cccagcagag ccatacgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcaccat tgggtgngtgg tgtccccggg ggtt
 404

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccattggccac ccttttcagga cagagctgcc ctccccatgc tggaggagcc acaggggcctg
 60
 gtctgtgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcaactt gtaattgtcca
 120
 ggcactccct gcttggatca ggggatctgg gtttcattct cccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgccttgatt gggggatctg gggttcatct
 240
 tcccagctcc tectgtcctc cgtggggcac ctgtgatgtc caggcaactcc ctgcttggat
 300
 cgggggggtct ggggttttgt ctatacttgg tgetcccttt cactcaggcc ccttcttgac
 360
 tctgcagagc taccctctgc catctctttc acgggggcct cctgcagctc ctgtgtctcac
 420
 cctgtgactc tgccttcggg gttgtcaaat gggggtcate ccaggaccgc caccactggg
 480
 tctgtgtcag gtttctgggg tggcagagtg cgggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1 5 10 15
 Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
 20 25 30
 Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
 35 40 45
 Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
 50 55 60
 Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
 65 70 75 80
 Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
 85 90 95
 Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
 100 105 110
 Phe Thr Gln Ala Pro Ser
 115

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

acgcgtttga agctggatgc atggatatcc agcgcgcgcca tcgggtcaaa tggggtgacg
 60
 ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgac gacgcctgcc
 120
 gggttggcct ggccggctgac aatgggtgcc atcttcccg tgaagttgttg aatggcagtg
 180
 gcaaagtgg gcgtgaggct gaagtcggcg aagttggcgg agccatcatt gatcgcaacc
 240
 tgcccaatgt gaatgcccg tggtctctct ttgctggccg ccggtgtgtct tgttgccagt
 300
 gtgcggccggg tgccgggatca gcaagtcacg gatgttggtg gggcgggtcat cggtgatcgc
 360
 tgcattcaat a
 371

<210> 1724

<211> 111

<212> FRT

<213> Homo sapiens

<400> 1724

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1 5 10 15
 Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
 20 25 30
 Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
 35 40 45
 Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
 50 55 60
 Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

65		70		75		80
Trp	Leu	Leu	Phe	Ala	Gly	Arg
				85		
				90		
				95		
Gly	Ala	Gly	Ser	Ala	Ser	His
				100		
				105		
				110		

<210> 1725
 <211> 807
 <212> DNA
 <213> Homo sapiens

<400> 1725
 ngtgacacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
 60
 atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctcccct tctctaggac
 120
 catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
 180
 gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
 240
 gaggatctta gagccaccaa gcaggaaactc ctgcagctgc gaatggagaa ggaggagatg
 300
 gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca gggccgagct
 360
 agtgctggag atactcgcca ggttgaggtg ctcaagaagg agctgctccg gacacaggag
 420
 gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggag acaccgggac
 480
 cgggagttgg agaagcagct ggcggtcctg agggctcagg ctgacagagg tcgggagctg
 540
 gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
 600
 gcttccaagg ctaagatggt gcccgaggca gaggcaacag tgctggggca gcggcggggc
 660
 gcagtgagga cgacgcttcg ggagaccag gaggaatatg acgaattccg ccggcgcatc
 720
 ctgggtttgg agcagcagct gaaggagact cgaggtcttg tggatggttg ggaagcgggt
 780
 gagggcacgac tacgggacaa gctgcag
 807

<210> 1726
 <211> 230
 <212> PRT
 <213> Homo sapiens

<400> 1726
 Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val
 1 5 10 15
 Arg Gly Leu Gln Arg Glu Leu Glu Glu Thr Ser Glu Glu Thr Gly His
 20 25 30
 Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys
 35 40 45
 Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

```

      50              55              60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg
65              70              75              80
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu
      85              90              95
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser
      100             105             110
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu
      115             120             125
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln
      130             135             140
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu
      145             150             155             160
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu
      165             170             175
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu
      180             185             190
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu
      195             200             205
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg
      210             215             220
Leu Arg Asp Lys Leu Gln
      225             230

```

<210> 1727

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1727

```

aaccaactct ccacaacatc gccagaaaca gtcgctgcc agaggctcca ccatgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggaacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcaac aagaatgtag tacccaacaa
180
acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaac aatttcccca
240
aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaacacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtataa gcaatctctg
420
gtgaaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

<210> 1728

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115          120          125
Gln Leu
      130

```

<210> 1729

<211> 470

<212> DNA

<213> Homo sapiens

<400> 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtccgtgcgc gtctataagt ccggtcggtt ggctacgcc
120
gccgtcaagg gggccacat tcgcctcaat ggagaccggg ttaaaccttc ccacgacgtg
180
aaaccggcgc ataccgtcac catccacacc cccggatggg accgggtcct caaggctatc
240
aaccgatca cgaagagat cggcgcacaa ctgcgggtcg aggcttacga agatctgtca
300
nngccccccg accgcctac ctctctgnc tccctcgccc gcgcgcacg tggggctgga
360
cgacccacca agaaggatcg tcgcgagatc gatcggtccc gaggccggga ctctcgctat
420
tgaggactct tcgccggccc caacacacca cggctcggcg ccgaattggc
470

```

<210> 1730

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

<210> 1731
 <211> 534
 <212> DNA
 <213> Homo sapiens

```

<400> 1731
agcgctccct gcttgcctgct gggcgaggagg aaggcgggcaa gagctgcgga gccctggaa
60
gagcttccag gaacctgcg ctgtgggata aaggaatgag gttcagaaag gggcaggagag
120
ttgcccgcag cgcacgcga cgtcttcagc cgcacgctg tctgacctc tctgtccctg
180
cccttcgcca gtctcaccat ggcctctctg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggtccag ctctggtcg aattgctgtg gcctctcttc
300
ctcttcttca tctggtggc tgttcgccac tcccaccgc cctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcgcg ggcaccgtgc cctggctcca gggctctc
420
tgtaatgtga acaacacctg ctttcgcag ctgacaccgg cgcaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg ctgctacgtc ggagagaggc tgga
534

```

<210> 1732
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 1732
Met Ala Phe Trp Thr Gln Leu Met Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Val Glu Leu Leu Trp Pro
20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

```

      85              90              95
Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly
      100              105              110

<210> 1733
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1733
acgcgtgatg gccgatccga ctgtgcccg tcacgacccg cggcgtcga gtcctgaccc
60
ggacatgccg tggtgatcc gcgacatcac ctcgggaac aacgtgatcg cgggcagcac
120
gggcaactgc accctctgcg tcgaggacta ctgcgcagg tacgcggcga ggatcctcaa
180
catcgtctcc gacggcaacg tctgcagcg cgcctcgccg gcacagccag cgtggctggg
240
tggtgtggtc gcggggatca gcgaactccg atccgtacgt attctccagc ctgcagcgtt
300
accggggcag cactggtttt taggaccttc gtcggtctc gatcgatggc gtgctgtcac
360
cgcgcccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg
409

<210> 1734
<211> 134
<212> PRT
<213> Homo sapiens

<400> 1734
Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro
1      5      10      15
Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn
20
Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr
35      40      45
Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn
50      55      60
Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val
65      70      75      80
Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg
85      90      95
Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp
100      105      110
Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp
115      120      125
Leu Lys Ala Val Thr Arg
130

<210> 1735
<211> 342
<212> DNA
<213> Homo sapiens

```

<400> 1735
 ggcgccatgg tcatcagcat catgtgttcg gcgcccgcg cagcaatgtt cgtgcgatca
 60
 agcgcgcctt ttagttcgac gcacggtaaa gcccgtgcgc atcgatgtag gccaggaccg
 120
 cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
 180
 cggacaccgc aagcggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg
 240
 ccaagggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc
 300
 tggcggcatc cgggcgttgc aaaaccagga tgtggcaatg ct
 342

<210> 1736
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 1736
 Met Val Ile Ser Ile Met Cys Ser Ala Pro Ala Ala Arg Met Phe Val
 1 5 10 15
 Arg Ser Ser Ala Pro Phe Ser Ser Thr His Gly Lys Ala Arg Ala His
 20 25 30
 Arg Cys Arg Pro Gly Pro Arg Gln Ala Pro Gly Asn Val Pro Thr Ser
 35 40 45
 Arg Trp Pro Ala Val Asp Gly Ser Gly Trp Arg Thr Pro Gln Ala Gly
 50 55 60
 Ser Ala Arg Arg Met Gln Tyr Ser Arg Ser Ala Arg Ser Gly Pro Arg
 65 70 75 80
 Gly His Leu Pro Thr Ala Arg Pro Ala Gly Cys Ala Arg His Pro Ala
 85 90 95
 Val Arg Trp Arg His Pro Gly Val Ala Lys Pro Gly Cys Gly Asn Ala
 100 105 110

<210> 1737
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 1737
 acgcgtgttc accatgacct ggaccgcccc gcggcccgac gggtcgagcg cggaggagtc
 60
 ggacgagacg actgtggtgg tccctgccat ctcagcgccc caggggtacg acgtgcaggc
 120
 gtccggcgcc cagctcacct cccacccagg cgaccgggtg gcgcggttgc acctcaacca
 180
 aggcagtagc acggcgaagg tcacgatcac cctgcgctaa ccttcaagc gtcttcagca
 240
 ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg
 300
 tccttttcgt gtgcgggat gcacctggca gcaccacct cggcccccat ggagaacagt
 360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
 420
 gtotttagggc catactgccg ccacgcagct gagaagggtga ccaatcgggt aagggtgactg
 480
 gttgcgctag tccatgcgag gccggc
 506

<210> 1738
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1738
 Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu
 1 5 10 15
 Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu
 20 25 30
 Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr
 35 40 45
 Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser
 50 55 60
 Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg
 65 70 75 80
 Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp
 85 90 95
 Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly
 100 105 110
 Arg

<210> 1739
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1739
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 240
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 300
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<210> 1740
 <211> 140
 <212> PRT

<213> Homo sapiens

<400> 1740

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Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
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Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
 20           25           30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
 35           40           45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
 50           55           60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
 65           70           75           80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
 85           90           95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
100           105           110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
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<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

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<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

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Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
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His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
 20           25           30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

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35 40
Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly
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<210> 1743

<211> 4121

<212> DNA

<213> Homo sapiens

<400> 1743

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420	gtggagagcc	tggagctggc	catccggaaa	gagatccacg	actttgccca	gctgagcgag
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<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

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 20 25 30
 Tyr Leu Val Gln Gly Arg Tyr Phe Leu Val Arg Asp Val Thr Glu Lys
 35 40 45
 Met Asp Val Leu Gly Thr Val Gly Ser Cys Gly Ala Pro Asn Phe Arg

50		55		60	
Gln Val Gln Gly Gly Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu					
65		70		75	80
Ser Gly Phe Arg Arg Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg					
	85		90		95
Glu Cys Val Ile Phe Cys Val Arg Glu Glu Pro Val Leu Phe Leu Arg					
	100		105		110
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu					
	115		120		125
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu					
	130		135		140
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu					
	145		150		155
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro					
	165		170		175
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu					
	180		185		190
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg					
	195		200		205
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala					
	210		215		220
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp					
	225		230		235
Ala His Gly Pro Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val					
	245		250		255
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His					
	260		265		270
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys					
	275		280		285
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met					
	290		295		300
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr					
	305		310		315
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln					
	325		330		335
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly					
	340		345		350
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr					
	355		360		365
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu					
	370		375		380
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu					
	385		390		395
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg					
	405		410		415
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro					
	420		425		430
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg					
	435		440		445
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala					
	450		455		460
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg					
	465		470		475
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp					

```

          485          490          495
Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp
      500          505          510
Gln Leu Glu Thr Leu Glu Ala Gln Leu Lys Ala His Leu Ser Glu Pro
      515          520          525
Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu
      530          535          540
Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu
      545          550          555
Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu
      565          570          575
Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp
      580          585          590
Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr
      595          600          605
Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly
      610          615          620
Phe Pro Glu Val Gly Glu Glu Glu Leu Val Ser Val Pro Asp Ala Lys
      625          630          635
Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu
      645          650          655
Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr
      660          665          670
Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile
      675          680          685
Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met
      690          695          700
Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys
      705          710          715
Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp
      725          730          735
Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly
      740          745          750
Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly
      755          760          765
Glu Asp Gln Pro Phe Ser Arg Leu Arg Tyr Arg Trp Gln Glu Gln Ser
      770          775          780
Cys Ser Leu Glu Pro Ser Ala Pro Glu Asp Leu Leu
      785          790          795

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<210> 1745

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1745

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240

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 tcgcga
 426

<210> 1746

<211> 142

<212> FRT

<213> Homo sapiens

<400> 1746

Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val
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 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp
 20 25 30
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
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<210> 1747

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1747

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 120
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 180
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<210> 1748

<211> 113

<212> FRT

<213> Homo sapiens

<400> 1748

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Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
 1             5             10             15
Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
      20             25             30
Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
      35             40             45
Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
      50             55             60
Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
      65             70             75             80
Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
      85             90             95
Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
      100             105             110
Ala

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<210> 1749

<211> 853

<212> DNA

<213> Homo sapiens

<400> 1749

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720

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 aggacactga gga
 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
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 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
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<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

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Arg Gln Gly	His Asp Asp	Ala Val Val	Glu Lys Ala Met Ala Thr Thr
	20	25	30
Gly Val Ser	Glu Leu Thr	Asp Arg Ala	Trp Ser Ser Leu Ser Gly Gly
	35	40	45
Glu Arg Gln	Arg Val Gln	Leu Ala Arg	Ala Leu Ala Gln Glu Pro Glu
	50	55	60
Ile Leu Phe	Leu Asp Glu	Pro Thr Asn	His Leu Asp Leu Pro His Gln
	65	70	75
Ile Asp Leu	Leu Glu Arg	Val Arg Gly	Leu Gly Leu Thr Thr Val Thr
	85	90	95
Val Ile His	Asp Leu Asp	Leu Ala Ala	Tyr Ala Asp Asp Leu Ile
	100	105	110
Val Leu Asp	Ser Gly Arg	Met Val Ala	Gly Gly Pro Ala Ser Thr Val
	115	120	125
Leu Thr Pro	Gly Leu Val	Arg Asp His	Phe Gly Val Asp Gly Glu Val
	130	135	140
Trp Ser Ser	Ser Arg Arg	Gly Phe Thr	Trp Asn Gly Leu Gln Thr
	145	150	155

<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

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 120
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 180
 ccaccccgca gaagggcccg gaaacagctg aacctctgcc ggggcaccca gagagtggac
 240
 cctgggttcg aggggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
 300
 atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccctctg agatgctgtt
 360
 gggggccntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
 420
 gagccccggc gctgtgcttc ctgtcggacc cagaggacc cgtctctggg agacgctgaa
 480
 gatgggaccc ttctctgcaa cgctctgtgg atcaggtaca agaaatacgg cactcgtctg
 540
 tccagctgct ggctgtgtcc caggaaaaat gtccagccca agaggctatg tggcagatgt
 600
 ggagtgtccc tggaccccat tcaggaaagt taaaccagc ttaccacctg tgagctgtgt
 660
 cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggtattg
 720
 ggaagagacc ggctctcctc ctctctgccca tctccagatt caaggatccc ggggggaagac
 780
 ccaggcctca ggtggcagag cctgctaggg gtcaccagcc ctttctccag tcagccttgg
 840

ccgaggccccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1754
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
 1 5 10 15
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
 20 25 30
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
 35 40 45
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
 50 55 60
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
 65 70 75 80
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
 85 90 95
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Arg Ser
 100 105 110
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
 115 120 125
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
 130 135 140
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
 145 150 155 160
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
 165 170 175
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
 180 185 190
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
 195 200 205
 Glu Gly
 210

<210> 1755
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1755
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgc tggagtcag
 60
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa gtgcattcca gtgcttcag
 120
 ttgggtgtga cagattttct accaacaatg ccttgtactt gcctgcaaat agttgttagt
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaatg ttagtttaac ttcaatagg
 240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaatcgg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtggttat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1756
 Met Gly Ala Ile Arg Asn Asp Gln Gly Glu Ser Leu Ile Arg Thr Ala
 1 5 10 15
 Phe Gln Cys Leu Gln Leu Val Val Thr Asp Phe Leu Pro Thr Met Pro
 20 25 30
 Cys Thr Cys Leu Gln Ile Val Val Asp Val Ala Gly Ser Phe Gly Leu
 35 40 45
 His Asn Gln Glu Leu Asn Ile Ser Leu Thr Ser Ile Gly Leu Leu Trp
 50 55 60
 Asn Ile Ser Asp Tyr Phe Phe Gln Arg Gly Glu Thr Ile Glu Lys Glu
 65 70 75 80
 Leu Asn Lys Glu Glu Ala Ala Gln Gln Lys Gln Ala Glu Glu Lys Gly
 85 90 95
 Val Val Leu Asn Arg Pro Phe His Pro Ala Pro Pro Phe Asp Cys Leu
 100 105 110
 Trp Leu Cys Leu Tyr Ala Lys Leu Gly Glu Leu Cys Val Asp
 115 120 125

<210> 1757
 <211> 1297
 <212> DNA
 <213> Homo sapiens

<400> 1757
 nggatccgac ggaaatagaa ttgaaggcat tctaaatgg ctaaccgtac agtgaaggat
 60
 gcgcacagca tccatggcac caacctcaa tatctggtg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgotttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 cctcttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaatgaaga tttcaagtat gtcgcgatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaaac ctttgtacaa tgactatcga
 420
 aaatcaaga gccagaaccg aaatggggag ttgaaattga tgcattgtga tgagttttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatacttc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc
 660
 tcacctgata ccgcccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgata tcccaaaagg
 780
 agaagcccc cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtccccg atcgccggca cagatcccg tccaagtccc caggtcacga ccgtagtcc
 900
 agacacagga gccactcaaa gtctcccgaa aggtctcaaga agagccacaa gaagagccgg
 960
 agaggggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa
 1020
 ggatactctg atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt
 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaaat cagtttttga cccaactaac cttgactgta ttcaactta
 1200
 tgagagtata aaggtatctgg aggttgggga tatgactgac aaggaaaggc tgggtgccacc
 1260
 tgaagacct ttcctttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met Ala Asn Arg Thr Val Lys Asp Ala His Ser Ile His Gly Thr Asn
 1 5 10 15
 Pro Gln Tyr Leu Val Glu Lys Ile Ile Arg Thr Arg Ile Tyr Glu Ser
 20 25 30
 Lys Tyr Trp Lys Glu Glu Cys Phe Gly Leu Thr Ala Glu Leu Val Val
 35 40 45
 Asp Lys Ala Met Glu Leu Arg Phe Val Gly Gly Val Tyr Gly Gly Asn
 50 55 60
 Ile Lys Pro Thr Pro Phe Leu Cys Leu Thr Leu Lys Met Leu Gln Ile
 65 70 75 80
 Gln Pro Glu Lys Asp Ile Ile Val Glu Phe Ile Lys Asn Glu Asp Phe
 85 90 95
 Lys Tyr Val Arg Met Leu Gly Ala Leu Tyr Met Arg Leu Thr Gly Thr
 100 105 110
 Ala Ile Asp Cys Tyr Lys Tyr Leu Glu Pro Leu Tyr Asn Asp Tyr Arg
 115 120 125
 Lys Ile Lys Ser Gln Asn Arg Asn Gly Glu Phe Glu Leu Met His Val
 130 135 140
 Asp Glu Phe Ile Asp Glu Leu Leu His Ser Glu Arg Val Cys Asp Ile

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145             150             155             160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
165             170             175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
180             185             190
Ser Ser Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
195             200             205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
210             215             220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Pro Arg
225             230             235             240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
245             250             255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
260             265             270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
275             280             285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
290             295             300
Lys Lys Ser Arg Arg Gly Asn Glu
305             310

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<210> 1759

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1759

```

aatccatag tcctcatggg caagagtac acagcgtgga ggaccaactc ccaggcactc
60
ggcctgggca gacacaatta ttgtcggaat ccagatgggt atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgcccccatg ctccacctgt
180
ggcctgaggc agtgcaaacg gctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

```

<210> 1760

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1760

```

Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
1             5             10             15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
20             25             30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
35             40             45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

<210> 1761
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1761
ngcgatctcg gctcactaca acctcggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaac aactggagaa ggaatggggg ttggggagca tcctctgaat atataaaggc
120
agccattcat tgtaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgcg gtaagacccc
240
acagtggggc caggtggtct tgcaccctgt attcccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc ccactcggtc ctattggatc c
351

<210> 1762
<211> 109
<212> PRT
<213> Homo sapiens

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

<210> 1763
<211> 356
<212> DNA
<213> Homo sapiens

<400> 1763

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gcgcgccggg ggcgcatgt ggagcgggca cttaccogtt tcatggccaa gacagcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagacctttc
 120
 accatccctt acctgacagc ttttcttcgg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga acctgtctct tcatatcagc
 240
 atggagatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggttagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1			5						10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55					60				
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
	65				70					75				80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85						90					95	
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cggccgcatt cttcgtgact gggtccccc gcgcgggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatcgat cgttctggca gcgctgggag
 120
 gtgcgggtct ggcgtctctg gccatgtoga gtgcgacgga ggccaatcag gcggaatgg
 180
 cccagggccag gccaggcatt attgcggcgg gcgcgggtgt cgtggatgtc gagggcggcc
 240
 tgctgcggct ctccaccacg cgcgacgggg tgattcagga tgtgccgggt aggaaggagg
 300
 agcgggtcaa agccggcgat atctctgcgc cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnnccgcccgcac ggcccgccatg acgcaccgcga ttgacgtgaa ccagggcgac gatgcccaacc
 60
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccca gccatccccg gccaatcaac gccagacgta tggccacaac gaggcgacg
 180
 agggacaacac ccacctggag tccgtcgttg tgcattcccc ccaccacgct caactcgtc
 240
 aatggacagc acaccgccag ccagagggca tgatccggat cggttcggcg gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1769

caccatgctg gctcgggttc acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 caggggtcatg ccgttcgtgg ccttgccatt gaggtgacga aagggtcagt tagcgtcag
 120
 accgttgaga tcctccatac tcccgcgacc acgcatcgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgacctca ccgagatggg agttcacgaa
 240
 atccctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggctgcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcgattttg caatgccccg
 420
 gcgcctctacg ttttgcacga gtcggccagt gaaccgctgg tgcatacagga gctc
 474

<210> 1770

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1770

His	His	Ala	Gly	Ser	Val	Arg	Arg	Ile	Arg	Val	Gly	Glu	Ser	Val	Leu
1				5					10					15	
Val	Thr	Asp	Gly	Gln	Gly	His	Ala	Val	Arg	Gly	Pro	Ala	Ile	Glu	Val
		20						25					30		
Thr	Lys	Gly	Ser	Val	Ser	Val	Glu	Thr	Val	Glu	Ile	Leu	His	Thr	Pro
		35					40					45			
Ala	Thr	Thr	His	Arg	Trp	Val	Ala	Val	Gln	Ala	Leu	Pro	Lys	Ser	Asp
		50				55				60					
Arg	Ala	Glu	Leu	Ala	Val	Ala	Thr	Leu	Thr	Glu	Met	Gly	Val	His	Glu
65				70					75					80	
Ile	Leu	Ala	Trp	Gln	Ala	Asp	Arg	Ser	Ile	Val	Arg	Trp	Lys	Gly	Asp
				85					90				95		
Lys	Gln	Ala	Lys	Gly	Val	Ala	Arg	Trp	Gln	Ala	Ala	Ala	Arg	Glu	Ala
			100				105						110		
Thr	Lys	Gln	Ser	Arg	Arg	Phe	Leu	Val	Pro	Gln	Val	Glu	Leu	Ala	Gln
		115				120						125			
Thr	Arg	Glu	Val	Val	Lys	Arg	Ile	Cys	Asn	Ala	Gln	Ala	Ala	Tyr	Val
		130				135				140					
Leu	His	Glu	Ser	Ala	Ser	Glu	Pro	Leu	Val	His	Gln	Glu	Leu		
145						150						155			

<210> 1771

<211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
 60
 taataacagc ggggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
 120
 caacaggctt ctcactctgt gccatgagca tgtgctagcc atggagacac tctgcatggt
 180
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
 240
 cagcaagcag ctttcattca tacacacaca tgtgcattca tgtgcac
 287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10				15			
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40						45			
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
		50				55					60				
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
					70				75					80	
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
				85					90						

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctcggagggtg aacaggcgca cctcgacgtc
 60
 ttcgattctc cgcttaacga gtacgcacgg atgggatttg agtacggcta ctctgttgcc
 120
 cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cgggtgcccg
 180
 acgatcatcg atgagttcat cgcttcggct ggctccaagt ggggtcagaa gtcgggagtc
 240
 gtgctgtctc tggcgacagg ttacgaaggt caggggctgc atcactcgtc ggcctgtctg
 300
 gagcgcttcc tcaattctatg cagtgaagac gctttggcgg tctgccagcc ctgcaccccg
 360
 gcaagctaca gccatttatt ggtcagcac gcg
 393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nnctctcgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa
 60
 cgaggaggca tcgctagggg ggggtggggc ggccccgctt cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccctg ccacccccac ccagagggg aagctggagc
 180
 tgggaggctg cagaccagg ccaaggtgtg gccagggtg gctttcttgg gaggtcttga
 240
 gcactctgct tcctggccac ccagctctgg ggctgtgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggctgt caccctgaac ctccccatg tctgtgtctt ttctcactgg
 360
 aacacggg
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

      1           5           10           15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35           40           45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50           55

```

<210> 1777
 <211> 370
 <212> DNA
 <213> Homo sapiens

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<400> 1777
agcttcttat cactatcctt tagtgctttt tggcttacct tagcggtaat gctccatcaa
60
gaatatggtt ttggtagtg c aactgcggga ttttttggcc tcgctggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcctctatgt tgttattgcc ttaattcagt
240
atcagtaacc aagttataat gattattggt gctaccatag tgtttgacct tgggtgtcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

<210> 1778
 <211> 123
 <212> PRT
 <213> Homo sapiens

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<400> 1778
Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
1           5           10           15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
20           25           30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
35           40           45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
50           55           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
65           70           75           80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
85           90           95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
100          105          110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
115          120

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<210> 1779
 <211> 345

<212> DNA

<213> Homo sapiens

<400> 1779

ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnnatatatgt
 60
 atacacgtgt gttatggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
 120
 gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtagggt gtgtatatct
 180
 gggaatatat gggtgtgtat atgtgtgtat aggtttttat atgtggggaa atattttaa
 240
 ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
 300
 atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
 345

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
 1 5 10 15
 Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
 20 25 30
 Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
 35 40 45
 Val Cys Ile Cys Val Tyr Met
 50 55

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

naacgctcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcgggaagag
 60
 aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
 120
 gatgtgaaca caacgcaaac tgggtcaagc gccacgccca ttacacctgt accettactg
 180
 cccagtgcac aagagcccgag ttatctttgc cagtgggtgcg ctcccagac acgaaagcac
 240
 aagacatggg aggggtgatgc tatttttata ttgcatggaa ataaaactac ttgttcgcta
 300
 cgatccgcac atgatggcag catgctagtg acgaatgctg ccttcggga
 349

<210> 1782

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1          5          10          15
Phe His Thr Pro Val Lys Arg Lys His Asp Thr Arg Ser Ser Asp
 20          25          30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
 35          40          45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
 50          55          60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
 65          70          75          80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
 85          90          95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
 100          105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

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gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgccatt ttcaagcagg aagattccag ccttccattg
120
gatgggtgaaa cagagcacc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaaaat ggggtgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaataca cagagcatca gcaacttgaa
360
ggatgggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatg cggttgaatt tctgtgggac
480
ccagcaaaaac gcacctctgc ttctattcag gtacactgca tcagcacaga atttactcca
540
cggaagcagc gaggtgaaaa gggagtgccc tttaggatcc aggttgacac cttaagcag
600
aatgaaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagacaa
720
gctcatgaaa aagaaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgcgcgag actacggtga ttctctggca aagcggaggc gttgttctcc gtggcccgat
900

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gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac cteccacag
 960
 cagagcactt gcaagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctggtga acaaatcag ccttcagcta cgatecagga aacacagcaa
 1080
 tggctgtctca aaaacagatt ctcttctctac acaagactgt tctctaattt ttcagggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gtccaaattt gtggtgcagc cgateggaatt
 1200
 cggctctata attcactgaa gtcaaggctcg gttagacccc gttaaacat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaag
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttgggaaga aatgattgcc
 1380
 tcagaagtgt ctogaaaaact tgcgctgggtg ttaataatcc ctctccacca aattaatcag
 1440
 gtttacagac aggggtccac cggtattcac attcttggtta gtgatcagggt aaatcaaatc
 1500
 atttgttttt ccttttcaga ctggtattta cttttatata tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc
 1620
 accttggaag aacttataac caagagtttc aggcaccta grgataatat ggaatacaag
 1680
 ccaaggaaaa ctggcttagc ctccccccag ccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcagcg ttggccctt tttatgagggt gactcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1			5						10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
		50			55				60						
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75				80		
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90					95		
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100				105						110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly


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115      120      125
Asp Arg Leu Leu Asp Leu Asp Ile Pro Met Ser Val Gly Ile Ile Asp
130      135      140
Thr Arg Thr Asn Pro Gly Gln Leu Asn Ala Val Glu Phe Leu Trp Asp
145      150      155
Pro Ala Lys Arg Thr Ser Ala Phe Ile Gln Val His Cys Ile Ser Thr
165      170      175
Glu Phe Thr Pro Arg Lys His Gly Gly Glu Lys Gly Val Pro Phe Arg
180      185      190
Ile Gln Val Asp Thr Phe Lys Gln Asn Glu Asn Gly Glu Tyr Thr Asp
195      200      205
His Leu His Ser Ala Ser Cys Gln Ile Lys Val Phe Lys Pro Lys Gly
210      215      220
Ala Asp Arg Lys Gln Lys Thr Asp Arg Glu Lys Met Glu Lys Arg Thr
225      230      235
Ala His Glu Lys Glu Lys Tyr Gln Pro Ser Tyr Asp Thr Thr Ile Leu
245      250      255
Thr Glu Met Arg Leu Glu Pro Ile Ile Glu Asp Ala Val Glu His Glu
260      265      270
Gln Lys Xaa Val Gln Gln Ala Asp Phe Ala Ala Asp Tyr Gly Asp Ser
275      280      285
Leu Ala Lys Arg Gly Ser Cys Ser Pro Trp Pro Asp Ala Pro Thr Ala
290      295      300
Tyr Val Asn Asn Ser Pro Ser Pro Ala Pro Thr Phe Thr Ser Pro Gln
305      310      315
Gln Ser Thr Cys Ser Val Pro Asp Ser Asn Ser Ser Ser Pro Asn His
325      330      335
Gln Gly Asp Gly Ala Ser Gln Thr Ser Gly Glu Gln Ile Gln Pro Ser
340      345      350
Ala Thr Ile Gln Glu Thr Gln Gln Trp Leu Leu Lys Asn Arg Phe Ser
355      360      365
Ser Tyr Thr Arg Leu Phe Ser Asn Phe Ser Gly Ala Asp Leu Leu Lys
370      375      380
Leu Thr Lys Glu Asp Leu Val Gln Ile Cys Gly Ala Ala Asp Gly Ile
385      390      395
Arg Leu Tyr Asn Ser Leu Lys Ser Arg Ser Val Arg Pro Arg Leu Thr
405      410      415
Ile Tyr Val Cys Arg Glu Gln Pro Ser Ser Thr Val Leu Gln Gly Gln
420      425      430
Gln Gln Ala Ala Ser Ser Ala Ser Glu Asn Gly Ser Gly Ala Pro Tyr
435      440      445
Val Tyr His Ala Ile Tyr Leu Glu Glu Met Ile Ala Ser Glu Val Ala
450      455      460
Arg Lys Leu Ala Leu Val Phe Asn Ile Pro Leu His Gln Ile Asn Gln
465      470      475
Val Tyr Arg Gln Gly Pro Thr Gly Ile His Ile Leu Val Ser Asp Gln
485      490      495
Val Asn Gln Ile Ile Cys Phe Ser Phe Ser Asp Trp Tyr Leu Leu Leu
500      505      510
Tyr Met

```

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
 60
 actgacggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcacia tgccctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggg
 180
 gctgaacttg tcttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatataag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc agggaaaaatt
 360
 gatggccttg tatctgggat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile Thr Asp Ala Glu Glu Lys Gly Leu Ile Thr Pro Gly Val Ser Val
 1 5 10 15
 Leu Ile Glu Pro Thr Ser Gly Asn Thr Gly Ile Gly Leu Ala Phe Met
 20 25 30
 Ala Ala Ala Lys Gly Tyr Lys Leu Thr Leu Thr Met Pro Ala Ser Met
 35 40 45
 Ser Met Glu Arg Arg Ile Ile Leu Lys Ala Phe Gly Ala Glu Leu Val
 50 55 60
 Leu Thr Asp Pro Leu Leu Gly Met Lys Gly Ala Val Lys Lys Ala Glu
 65 70 75 80
 Glu Ile Gln Ala Lys Thr Pro Asn Ser Tyr Ile Leu Gln Gln Phe Glu
 85 90 95
 Asn Pro Ala Asn Pro Lys Ile His Tyr Glu Thr Thr Gly Pro Glu Ile
 100 105 110
 Trp Lys Ala Thr Ala Gly Lys Ile Asp Gly Leu Val Ser Gly Ile
 115 120 125

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt
 60
 agggtcacct aacaaggaga tgagaacaaa ctttaaatct atctctctaa ggaatttggg
 120
 cttcgggttt ttaaggttta gaatggggcca aaacatggac attattgatt ggtcaaaag
 180

tacagggtca tggaaacctgg agatgaaaaa gccatattct catgetgac ctgttctct
 240
 gtggaaggtc ttcaaatgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1788

Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789

<211> 353

<212> DNA

<213> Homo sapiens

<400> 1789

ttccacata caccacgcg gcattgtctg acagagatgc acaccctag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacacac gtacacgccc accacccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
 180
 gaacctgtcc cccgggtctc tccgcaggc aggtctcctc gccgagtctc cgaaaagggg
 240
 cggctgtggc ggccctggcg cccagctggg caacgcttcg tggatatca cogcttctct
 300
 ctgttgtgcc cagcgccccg actgaagatc cggatcttca gtccctggcg cgc
 353

<210> 1790

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1790

Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

<210> 1791
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1791
aaatttcagt tagagattag ggaaaaataa gatgttattt ttcccatcc tagtttacag
  60
accccccaag aaccactca tggattctcc cgagtccttg gacctggctc agacaccctt
  120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtcctctg
  180
ccctccctgc tcaggggact gcttgtaaac ttcattgggt tggggacata tatattatag
  240
gagagagaca gagaaaaaga aagagaggaa atgttattct cttgtcttgt atctgtatct
  300
ccactccgat tccattcccc tctgctgctc tctctctctc cctcccttca cgcgt
  355

<210> 1792
<211> 108
<212> PRT
<213> Homo sapiens

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1              5              10              15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20              25              30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35              40              45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
      50              55              60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
  65              70              75              80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85              90              95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100              105

<210> 1793
<211> 510
<212> DNA
<213> Homo sapiens

```

<400> 1793
 tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca caccatatac
 60
 cacccectcg gagctcctcg cttaccagtc gcccaagag cttgtccccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggcatctc aatctcttct ccaacttcac
 180
 cttctctctt ggagatgaat cctgacaaca cctcagggtt gaggcagaag tcgggtggagg
 240
 ccgagccgtg ctcattgttg atgggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcaagatggc caaggccgce ggccctctcat ccctgcgctt cctgcccacc tcgcccactg
 360
 ggcgctgac cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggcttttc
 510

<210> 1794
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1794
 Met Thr Leu Ala Trp Glu Ala Phe Arg Arg Pro His Pro Tyr Pro Pro
 1 5 10 15
 Pro Arg Ser Ser Ser Leu Thr Ser Arg Pro Lys Ser Leu Ser Pro Gln
 20 25 30
 Gln Pro Glu Ser Ala Arg Pro Leu Ala Asn Thr Ile Gly Val Ile Ser
 35 40 45
 Ile Ser Ser Pro Thr Ser Pro Ser Ser Leu Glu Met Asn Pro Asp Asn
 50 55 60
 Thr Ser Gly Leu Arg Gln Lys Ser Val Glu Ala Glu Pro Cys Ser Leu
 65 70 75 80
 Trp Met Val His Arg Tyr Thr Pro Gln Ser Thr Gly Glu Ala Cys Thr
 85 90 95
 Met Ala Lys Ala Ala Gly Pro Ser Ser Pro Ala Leu Leu Pro Thr Ser
 100 105 110
 Pro Thr Gly Arg
 115

<210> 1795
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1795
 ctatgctctg agtcacttct ccaagcattc cttctgttgc ttccttcctt gggctgatca
 60
 tttaagaag tctacattc cagaaaaactt gagaggtgct tcttctctgg aagccctttt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctg
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccagggt gagagctcca tgagggcacc aatttttctg tgttttagctg tgtctctaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 1796
 Met Gln Val Gln Val Trp Met Gly Asn Leu Met Asn Lys Leu Trp Ser
 1 5 10 15
 Phe Thr Val Tyr Met Glu Arg Leu Ile Ile Lys Gln Lys Ile Ala Asp
 20 25 30
 Thr Ala Glu Val Cys Arg Met Leu Pro Glu Leu Thr Glu Lys Lys Arg
 35 40 45
 Gly Phe Gln Arg Arg Ser Thr Ser Gln Val Phe Trp Asn Val Gly Leu
 50 55 60
 Leu Glu Met Ile Ser Pro Gly Lys Glu Glu Gln Lys Gly Met Leu Gly
 65 70 75 80
 Glu Val Thr Gln Ser Ile
 85

<210> 1797
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 1797
 aagcttcact atgttgccca ttccatgggc ggcgctgctgg tcgctgacct gctggcggac
 60
 cggaatttgc cgatgtcatt gatcagggtca tctgtctggtg ctgcgcgcag caggggctcgc
 120
 gtgccgctaa tttgttggtg ccatttgctg gcgggcgcac cgtcaaatgg tgtatcacag
 180
 cgactatgtg atgcgcgttg cgcacacgcc cggcagcgcg cgttggagcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctgcgcaatt ttaccgggaa tgaccatgt
 300
 gccggtggat tacctggggc attgttcgtt attgtacagc ccacgcgt
 348

<210> 1798
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
 20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
 35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
 50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
 65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
 85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
 100           105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

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acgcgctgcc tcctgctggt cgggattttc ctgctgtag ttaaccaaac caccggcgctc
60
aatacogtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccacggcg
120
tgattatttt cagaggtggc taatggagtc atgtctgtta ttggtgcgcg tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggctcgtg
240
gtgtgtctcc ttggtattgc ggctactttc gggetggcaa ttgctctcca tgtgggtcaa
300
ggggtaaccga agtgggcgcc tattctcgtg ctgcctctga tgagtatctt catgcttatc
360
gtgcac
366

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<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

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Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
 20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
 35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
 50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
 65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```

      85              90              95
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val
      100              105              110
Leu Met Ser Ile Phe Met Leu Ile Val His
      115              120

<210> 1801
<211> 597
<212> DNA
<213> Homo sapiens

<400> 1801
aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttgatccctg ccagcatctg ggtgacggtc
120
cttggacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg caggcggtgg
180
cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
240
catatggggg ttcccggccc cggcgggccc tgctcggaaa tctacatcga tcgtggccca
300
gcctatggtc ccgacggtgg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggccatttgc gcagccttaa catgacact ggtgccggtc tcgaacgtat tgcctaccta
480
ctccagggcg tcgacaatat gtacgagact gaccagggtat tccctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
597

<210> 1802
<211> 199
<212> PRT
<213> Homo sapiens

<400> 1802
Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala
1      5      10
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp
20     25     30
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp
35     40     45
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly
50     55     60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp
65     70     75     80
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile
85     90     95
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu
100    105    110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu

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      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
  130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
  145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

<210> 1803
<211> 708
<212> DNA
<213> Homo sapiens

<400> 1803
cccacaacga tggccgcatc ggtggatggg gaagtgcctg aggagggtcac acctaaggac
60
ctcctcctcg ccctcatctc cgagatcggc accggtgggg gacaagggtca tatgtcgtag
120
tatcgcgcgcg aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaataatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgctctcg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
300
cgcaactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggagcgctcg
360
aatctcgcgc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtgggtgcgg cggtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgagta
480
catggtattg accccgacga gatcggttcc cggtttgctg acatcttttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgacctc ccggttccat attgatgacg tcacgcgt
708

<210> 1804
<211> 236
<212> PRT
<213> Homo sapiens

<400> 1804
Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
  1              5              10              15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
      20              25              30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```


ctggaaggtt cgatgcgcgt cgctggatcg ctggtacagt ggctgcgcca caacctcaag
 720
 atgttcgaga cgcgcccgca aatcgaaagc ctcgccaaca ccgtcgagga caatgggtggc
 760
 gctacttttg tgccggcctt ctctggcctg ttcgcgcgct actggcgctcc gga
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa Ala Val Val Trp Asp Lys Asn Thr Gly Glu Pro Val Tyr Asn Ala
 1 5 10 15
 Ile Val Trp Gln Asp Thr Arg Thr Gln Lys Ile Cys Asn Glu Leu Ala
 20 25 30
 Gly Asp Lys Gly Ala Asp Arg Tyr Lys Glu Ile Cys Gly Leu Gly Leu
 35 40 45
 Ser Thr Tyr Phe Ser Gly Pro Lys Val Lys Trp Ile Leu Asp Asn Val
 50 55 60
 Glu Gly Ala Arg Ala Arg Ala Glu Ala Gly Asp Leu Leu Phe Gly Asn
 65 70 75 80
 Met Asp Thr Trp Val Leu Trp Asn Leu Thr Gly Gly Thr Asn Gly Gly
 85 90 95
 Val His Ile Thr Asp Pro Thr Asn Ala Ser Arg Thr Met Leu Met Asp
 100 105 110
 Val Arg Lys Leu Gln Trp Asp Asp Ser Met Cys Glu Val Met Gly Ile
 115 120 125
 Pro Lys Ser Met Leu Pro Glu Ile Lys Ser Ser Glu Ile Tyr Gly
 130 135 140
 Tyr Gly Arg Lys Asn Gly Leu Leu Ile Asp Thr Pro Ile Ser Gly Ile
 145 150 155 160
 Leu Gly Asp Gln Gln Ala Ala Thr Phe Gly Gln Ala Cys Phe Gln Lys
 165 170 175
 Gly Met Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Met Leu Met Asn
 180 185 190
 Thr Gly Glu Glu Ala Ile Phe Ser Glu Asn Gly Leu Leu Thr Thr Val
 195 200 205
 Cys Tyr Lys Ile Gly Asp Gln Pro Thr Val Tyr Ala Leu Glu Gly Ser
 210 215 220
 Ile Ala Val Ala Gly Ser Leu Val Gln Trp Leu Arg Asp Asn Leu Lys
 225 230 235 240
 Met Phe Glu Thr Ala Pro Gln Ile Glu Ala Leu Ala Asn Thr Val Glu
 245 250 255
 Asp Asn Gly Gly Ala Tyr Phe Val Pro Ala Phe Ser Gly Leu Phe Ala
 260 265 270
 Pro Tyr Trp Arg Pro
 275

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807
 nnntatcggc aagggtggtcg aaatggctct tgactatgtc aacgggtgaca cgtgcccgcg
 60
 gaccgccecca ttcatattgtc gtttgacgtc gacgcgatgg accctagcgt ggccecgagc
 120
 acaggcacac cgggtgcgtgg tggctctaca ttccgagaag gccactacat atgcgaggcg
 180
 gtagctgaga cgggctcggt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
 240
 aagcatgcgg ctgagcagac gatcgccgtg ggttgttccc tcattcgttc ggcgctgggg
 300
 gagacgcttc tgtaatgggt gcatgatggg cgggtggtcc atagccatgc atagacactc
 360
 cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
 420

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

His	Val	Arg	Arg	Asp	Arg	Pro	Ile	His	Leu	Ser	Phe	Asp	Val	Asp	Ala
1				5					10				15		
Met	Asp	Pro	Ser	Val	Ala	Pro	Ser	Thr	Gly	Thr	Pro	Val	Arg	Gly	Gly
			20					25				30			
Leu	Thr	Phe	Arg	Glu	Gly	His	Tyr	Ile	Cys	Glu	Ala	Val	Ala	Glu	Thr
			35				40				45				
Gly	Ser	Leu	Val	Ala	Met	Asp	Met	Val	Glu	Val	Asn	Pro	His	Leu	Glu
			50			55				60					
Lys	His	Ala	Ala	Glu	Gln	Thr	Ile	Ala	Val	Gly	Cys	Ser	Leu	Ile	Arg
65					70					75				80	
Ser	Ala	Leu	Gly	Glu	Thr	Leu	Leu								
					85										

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

nnaccggtga tcgcatcggt gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
 60
 cagaccggtg tcaacgcatgc gtatgcctc gggcatggca gcctcctcgt gatgcggggc
 120
 cccacccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
 180
 gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggttaaca accggcgctg
 240
 ccgaggtgcc cggatcgccg ggcgattcgc gcccccgttt cgcgattcat gcgcatcga
 300
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
 340

<210> 1810

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1810

```

Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1             5             10             15
Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
      20             25             30
Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
      35             40             45
Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
      50             55             60
Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
65             70             75

```

<210> 1811

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1811

```

nnacgcgtgc taggaatagc catggactca toatcagata catgctggat ttatacttca
60
ctgggtggat tgtatgagct gtcgtaaaa gatgaggctc gcgatatgtg gcatttgttg
120
ctgaaacggt ggcactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
180
caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgtc
240
gagtgtctatg ctacggccca gacaccggcc tttgaacagg ttgtgcttcc ttgatggac
300
gtctgtgccc acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
360
caagctcgcg tgctcgtct catgctggct acttggtcta ttgaattgta tgtggccgcc
420
attcaagcgc atgaaccac ctccgaacat tatcagacac ttttctgga agcccaggag
480
acacttgagc ggcatcatga
500

```

<210> 1812

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1812

```

Xaa Arg Val Ser Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1             5             10             15
Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
      20             25             30
Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

```

          35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
  50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
  65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
          85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
          100              105              110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
          115              120              125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
          130              135              140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
          145              150              155              160
Thr Leu Glu Arg His His
          165

```

<210> 1813

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1813

```

tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
  60
gtcctgaggg gtggcagtga cctggtaggg gtgcctcggg cgtcgcggct tgcgatcgct
  120
ggttctcggg gatgactctc ggaatgaatat agatctgcta agacgtcatt agattcgctt
  180
ggcgcttggt tgggaacggg tgtgaagcag cttctgatg gatgtatatt tgcgttggtt
  240
aataagggtt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
  300
ccgctgtaga tcttccctat ggtcattctg gggccaggcg ctccgccagc tggccatcgc
  360
aacaatgggt tggcgaaggg ttatgaggtg agtatggcgt agcaagtcgt tggacaggcg
  420
tctaca
  426

```

<210> 1814

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1814

```

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1              5              10              15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
          20              25              30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
          35              40              45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815

<211> 303

<212> DNA

<213> Homo sapiens

<400> 1815

```

ggcgccacaca tggtacgct cgcaccgagg cacaaggtaa gccgtagcgg cgggatcgag
60
cgccaggcgg cgcattctcgg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgata tcgaggggca acgcccgcgc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaat cgcagtgat gacgagcaag ggccgcctcg tctcctgcgc
240
ccggttcagg cagtgaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggg
300
acc
303

```

<210> 1816

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1816

```

Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1      5      10      15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20      25      30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35      40      45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50      55      60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65      70      75      80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85      90      95
Gly Thr

```

<210> 1817

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt cgaatcgctcg
 60
 catgctgttg agccacacg cgaatggcaca cttcagggtca ttcacgcaaa gacatggatc
 120
 cgcgcgtcct tatttcacat gctgcatctg cgaatggccat tcgcagcagt tttttctctt
 180
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg
 240
 tacaggcggt gacgcatgtc ccgtcaaaact cgtccccaaga cgtgtttgtt attgaccaac
 300
 ttccagcagc gataccccta atcaaaactcc tgtgtgggag cgtgtgtcatg tactactgtc
 360
 acttccctga caaagaaatc agcgtgtgctc tggctcgaca gcgaggcacg cgt
 413

<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1				5					10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
			20					25					30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
		50				55				60					
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	

Tyr Arg Ala

<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

ggatccaaga gtggggcatc aggaacatgc catggttgctc gtggtgctgg aatgagaaca
 60
 atcacaagac agataggcct tggcatgatc caacagatga aactgtttg ccctgaatgc
 120
 aaagatcag gtagatcat aagtgacaag gacaaatgcc caagctgtaa aggaacaaca
 180
 gtagtccagg agaagaaggt gtagaggtt catgtggaga aaggaatgca acataacca
 240
 aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattgtt
 300
 ttgtcttgc aacttaaaga ccatccaaaa ttaagagga tgt
 343

<210> 1820

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1820

```

Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
 1           5           10           15
Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
 20           25           30
Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
 35           40           45
Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50           55           60
Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65           70           75           80
Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
 85           90           95
Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
100           105           110
Arg Met

```

<210> 1821

<211> 285

<212> DNA

<213> Homo sapiens

<400> 1821

```

aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat
60
gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag
120
gcccggaaaa agttgctcgc caaggaggcc gccacagcga tgacctagat tgtctactgc
180
tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttcogaa
240
tctagtttca tatgtttctg tccaccagac catgtttaga agctt
285

```

<210> 1822

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1822

```

Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn
 1           5           10           15
Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Ile Met Gly
 20           25           30
Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys
 35           40           45
Glu Ala Ala Gln Arg Met Thr
 50           55

```

<210> 1823
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1823
 ngttggtgc tggtgctggg cgttctgtcc ctgacgggct ggcgccgttc cgaatgcgctg
 60
 tggggcgctgg tcgataagct ctgcatggcc aactatcagc aaaagcgcga tccggccccg
 120
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggct ttagcgtgct gcaaaacccg
 180
 cgttatccct atcatttcat tctggtgccg acggcgccgc ttccggcat tgaagacccg
 240
 ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttaccgg
 300
 ctggcgccg agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc
 360
 gcttacggcc gcagccagaa ccaattg
 387

<210> 1824
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1824
 Xaa Trp Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg
 1 5 10 15
 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
 20 25 30
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
 35 40 45
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
 50 55 60
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
 65 70 75 80
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
 85 90 95
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
 100 105 110
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln
 115 120 125
 Leu

<210> 1825
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1825
 gtgcacggac gacgcgcac agggactcgt gtgccgcga tgggacgacg gcgatgcgtg
 60

tgcgtgcata ccgctgctct gccaggtcgt gcgtgcgatt gtcgccgaca catcgccggc
 120
 ttggcacgtc gtgattgggc gcctaggcac catgtcgag gccgacatgg acatgtgggc
 180
 gtcgtgcctc gatacgcgcg acccttctctg ctctcggttg gccttggtg cctggagcgc
 240
 gatgcctggc ctacggggcac gcgatgcac ggtgggtctac ctgtcggaca tgccgctggg
 300
 tctggcctca ggtgcgtggc cgatccgcgt gcctcgctcg gcgttatgtg tctgccggcg
 360
 cctatgccat tcatctcgtg cagctacgtc acctggctga tctcgacgcg gct
 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
1				5				10				15		
Arg	Ala	Cys	Asp	Cys	Arg	Arg	His	Ile	Gly	Gly	Leu	Ala	Arg	Asp
			20					25				30		
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly
			35					40				45		
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Cys
			50				55				60			
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly
65					70					75				80
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp
			85						90			95		
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe
			100					105				110		
Ser	Cys	Ser	Tyr	Val	Thr	Trp	Leu	Ile	Ser	Thr	Arg			
			115				120							

<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

ctggccaact ggggtgccga cctgttcatg aagcgcgtcg aagccgacca ggaatggtcg
 60
 ctgttcgacg ccgcgctggt gccggagtgc accgacctgt tcggcgagc cttcgaaagg
 120
 gcctacctgc agggccgaag cgagggaag gccaacgcga cgatctctgc ccgcaagctg
 180
 tacgcccgcga tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac
 240
 aagtgcgaacc gcgccagcaa ccagacctg cgtccggcca acgtgatcca cctgtccaac
 300
 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg
 345

<210> 1828

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1828

```

Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp
 1             5             10             15
Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
      20             25             30
Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
      35             40             45
Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
      50             55             60
Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
      65             70             75             80
Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
      85             90             95
His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
      100             105             110
Glu Thr Ala
      115

```

<210> 1829

<211> 4457

<212> DNA

<213> Homo sapiens

<400> 1829

```

attccaatgg ttgtgtctga ttttgatctt ccagaccaac agatagaaat acttcagagt
60
cttgactcgg gatgttcaca gtctcttgct ggggacaact tgagttacga agttgatcct
120
gaaacccgtga atgccaaga ggattctcaa atgccaagg aaagctcccc agatgatgat
180
gttcaacagg tagtatttga cctgatattg aaagtgtgaa gtggcctcga agtggaatct
240
gcatcagtta catctcaatt agaaattgaa gctatgcccc caaagtgcag tgatatagat
300
ccagatgaag agacgattaa aattgaagat gactccattc gacagagtca gaatgccttg
360
ctgagtaatg aaagtcttca gtttctgtct gtgtctgcag agggaggcca tgagtggtg
420
gcaaattggaa tctccaggaa tagctcctca ccttgatttt caggaaaccac acacactctt
480
catgactctt ctgtgtcttc catagaaacc aaatctagac aaaggagtca cagtagtatt
540
caattcagct tcaagaagaaa attatcagaa aaagtctcgg agaaggaaac aatagtgtaa
600
gagtcaggta aacaaccagg agcaaaacct aaagtaaaac ttgccagaaa aaaggatgat
660
gacaagaaaa aatcttcaaa tgaaaaactc aaacaaacca gtgtattctt cagtgatggt
720

```

ctggatttag agaactggta tagctgtgga gaggagaca ttcttgaat tgagagtac
780
atgggttctc caggatctcg aaaatctccc aatttcaaca ttcattctct ctatcaacat
840
gtgctctctg atctccagtt gtagattca tccaggactt tgtagcttt ctctgccatc
900
aaagccatct tgaaaactaa ccttatagct ttgtaaatg ccatttcaac tactagtgt
960
aataatgcac atactctca gttgtctctc cttcagaatc tattggccac acaccgagt
1020
tctgttatgg gcaagattt ttatagtcac attccagtgg actcaaatc taactccgg
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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
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Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val
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325          330          335
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355          360          365
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370          375          380
Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met
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Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser
420          425          430
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435          440          445
Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu
450          455          460
Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser
465          470          475          480
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485          490          495
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515          520          525
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Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu
545          550          555
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565          570          575
Thr Ser Thr Leu Pro Tyr Met Gly Lys Val Leu Gln Arg Val Val Val
580          585          590
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595          600          605
Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala
610          615          620
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Ala Ile Ile His Tyr Cys Leu Leu Asp Pro Thr Thr Gln Tyr His Gln
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<210> 1831
 <211> 508
 <212> DNA
 <213> Homo sapiens

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<210> 1832
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1832
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 35 40 45
 Gly Lys Thr Phe Tyr Leu Arg Tyr His Asp Ser His Gly Lys Leu Arg
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 Gln Cys Lys Ile Gly Asp Ala Ala Val Ser Tyr Asp Lys Ala Arg
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 Gln Lys Ala Met Arg Leu Arg Trp Lys Val Glu Trp Gly Gly Asn Pro
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 Leu Glu Glu Arg Gln Ala Leu Arg Ala Val Pro Thr Leu Ala Glu Phe
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 Gln Ser Thr Leu Ser Phe Leu Lys Cys His Val Leu Pro Arg Phe Gly
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<210> 1833
 <211> 430
 <212> DNA
 <213> Homo sapiens

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<210> 1834

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1834

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			20					25				30			
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His	His	Gln	Val	Glu	Thr	Asp	Asp	Pro	Arg	Arg	Asp	Ala	Phe	Ser	Ala
			50				55				60				
Arg	Val	Trp	Gln	Arg	Leu	Gly	Leu	Gly	Phe	Pro	Ala	Phe	Arg	Arg	Arg
					70				75					80	
Pro	Ala	Ile	Leu	Glu	Ile	Asp	Glu	His	Leu	Arg	Ser	Cys	Cys	Gln	
			85				90					95			
Ala	Leu	Lys	Val	Ser	Lys	Val	Met	Arg	Arg	Asp	Lys	Gly	Arg	Ser	Ala
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<210> 1835

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1835

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<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
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 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
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 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
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 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
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 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
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<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

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 180
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<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
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 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
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<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
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<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
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 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
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 Ala Ala Asp Ala Ala Phe Lys Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

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      50              55              60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
65              70              75              80
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
      85              90              95
Leu Asp Val His
      100

```

```

<210> 1841
<211> 330
<212> DNA
<213> Homo sapiens

```

```

<400> 1841
nnctccaaga acgtcccgga gtgggggcccc agggcgctcg aactccccgg cgggccccgg
60
gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg
120
cggcgctggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcgggtgagg
180
acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccgggtcgg cagcccgcgcg
240
cagcaactcg cgatgatcgc ggggggtcgcg gcgaacggca tcggtccgat cctcgaccag
300
catttccgcg tcgaaaaatct ccccgacgcg
330

```

```

<210> 1842
<211> 110
<212> PRT
<213> Homo sapiens

```

```

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1              5              10              15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
20              25              30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
35              40              45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
50              55              60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65              70              75              80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
85              90              95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
100              105              110

```

```

<210> 1843
<211> 473
<212> DNA
<213> Homo sapiens

```

```

<400> 1843

```

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
 60
 acagtttttg gtccagatta acaccaagca gggttcataa agccttaagt tatgcatcat
 120
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttctccag
 180
 tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
 240
 tccccgggga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
 300
 acataccacc acatgatgat cgagggtcaa gagcatttgc ccatgatgca ggaggctctc
 360
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
 420
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1			5						10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
		20						25						30	
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
	35					40					45				
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50				55					60					
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
	65			70					75					80	
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85					90					95		
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
			100				105						110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
		115				120							125		
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
	130					135						140			

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcttagctt tggagacctg aaccacttga tcagtgaac aatgagtggg
 60
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgcaagt
 120
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
 180

cgtggctccc agcagtagccg tgctctcact gtccctgagc tgaccacgca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgctgacccg cgctcatggcc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagAAC
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1846

Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala
 1 5 10 15
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
 20 25 30
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu
 35 40 45
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln
 50 55 60
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp
 65 70 75 80
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
 85 90 95
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp
 100 105 110
 Glu Gln Met Leu Asn Val Gln Asn Lys Ser Ser Tyr Phe Val Glu
 115 120 125
 Trp Ile
 130

<210> 1847

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1847

cagccgtgct ttctctcgct aactcgggaa cggctatata gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtcaa gctggcgagc
 120
 ctggccgcgcg ccgcgttggc cgatcacgcc atgttgagc aggccttcca gctgttccag
 180
 caaaaaagtg gcggacaatc tcttgccgga tggctcggtt ttcgacttca gggagcgcga
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctggtt caggcgggcc tggcggggca
 300
 gccctaacgg tggcaactgg ctgacttaca cgcgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaagaac aggttcagca aagagcaata gaattgtccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactaggtt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagtgc tcttgatcca
 240
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctcgca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaanaatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

```

65              70              75              80
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
85
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
100              105              110
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
115              120              125
Asn Gln
130

```

<210> 1851

<211> 574

<212> DNA

<213> Homo sapiens

<400> 1851

```

ncgatcgagg aggcctttccg cactgggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggccctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgtctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatgggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtcagga gtcccagcaa
360
ttcaagcaca acttctctgct gctcttcctg aagctcaggt gggttcctcaa gcgctggcgg
420
caggggcaagg ttttccccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acggggggaca gctggaccca gaacacgccc aatg
574

```

<210> 1852

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1852

```

Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
1              5              10              15
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
20              25              30
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
35              40              45
Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg Gln Leu Arg
50              55              60
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
65              70              75              80
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

```

	85		90		95
Ser	Leu	Gln	Arg	Arg	Leu
	100				110
Met	Leu	Val	Gln	Glu	Ser
	115				120
Phe	Met	Lys	Leu	Arg	Trp
	130				140
Leu	Pro	Ser	Glu	Gly	Asp
	145				155
Leu	Tyr	Leu	Leu	Met	Glu
	165				170
Asn	Lys	Ala	Cys	Thr	Gly
	180				185

<210> 1853

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1853

gccggcgccg accaagccac ggcattgcccc acccaccttg gaagaggtgt cgttcgccca
60
cgctcattgag gagcgcgccg tcgaagctga ctgtgtcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcattggc ac ttctgcgcat ctgcgaccac atggatggca aggtcggcac
180
gacgttttac ctggatgacg atgtcatttt tctgcgacca cagaagcagc gctcagccga
240
gggcccagca ctgaatacag agcccgctctc ttggcgagc ttgctcgagc gcgctgctgc
300
atagaataca tataccaag ctatgatgat gccgtcgt
338

<210> 1854

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1854

Met	Pro	His	Pro	Pro	Trp	Lys	Arg	Cys	Arg	Ser	Ala	Thr	Ser	Leu	Arg
1			5					10						15	
Ser	Ala	Pro	Ser	Lys	Leu	Thr	Cys	Ser	Ser	Ala	Arg	Ser	Ile	His	Ser
		20					25						30		
Ser	Leu	Arg	Arg	Ala	Trp	His	Phe	Cys	Ala	Ser	Arg	Thr	Thr	Trp	Met
		35				40						45			
Ala	Arg	Ser	Ala	Arg	Arg	Phe	Thr	Trp	Met	Thr	Met	Ser	Phe	Leu	Ser
	50				55					60					
Arg	His	Arg	Ser	Ser	Ala	Gln	Pro	Arg	Ala	Ser	Asp	Ser	Asn	Thr	Ser
	65				70				75				80		
Pro	Ser	Leu	Trp	Pro	Ser	Cys	Ser	Ser	Ala	Leu	Leu	His	Arg	Ile	His
				85				90						95	
Ile	Pro	Lys	Leu												
			100												

<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg cagggtgttcg tccagtgcag caccagcagc
 60
 ccgagcgaaa cgcaggaaaat cgtggcgcac gtccctggacc tggacaacca cgaggtcacg
 120
 gtgcagtgct tgcgcatggg cgggtgcttt ggcggtaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgaccctg accggggcgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccggaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagcctgg acctctcggg gccggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgcgcg ctgccccagc cgtcgcctac cgtatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcacgac atgctcagca tggctcagcag cagccagaac ggaatcgcga
 120
 gcaggcgcgc gaacagctca ctgccaccga gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgcgcgag gagcagccac catcgccgcg tcatgctgcg gcactcgata ccaatacgtt
 240
 gcgcttcaac caatcgatct tggctcagggc atgcgcgcga tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaacggag
 360
 acgcagcagc ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1			5						10				15		
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
		20					25					30			
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
	35					40					45				
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50				55					60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65			70						75					80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85						90					95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
			100												

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgtcac caacttcttc tacttccgca agatggattt ggatttttctg
 60
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgcgc acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattggt
 180
 ctgactcgag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg
 300
 agcaatctgg gcctgttcac ctttacgggt gcatacttac catgg
 345

<210> 1860

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1860

```

Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1             5             10             15
Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20             25             30
Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35             40             45
Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50             55             60
Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65             70             75             80
Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85             90             95
Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
100             105             110
Leu Pro Trp
115

```

<210> 1861

<211> 435

<212> DNA

<213> Homo sapiens

<400> 1861

```

gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccggggcgt tagaaaagcc
60
aatagtgcgc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
120
aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
180
atgaattact attcacttga aagatcaatg caaatagcaa aagaagaca gaaaacgttt
240
aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
300
tcatttgaac cgaaatacga aaaagtcagt aaattatttg atgggtttaga aatcccaacg
360
cctgaagatt ggaagcatt gcaaaaagaa gttgaaactc acgggtttatt ccattgcttat
420
cgtttagoga ttgca
435

```

<210> 1862

<211> 145

<212> PRT

<213> Homo sapiens

<400> 1862

```

Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

```

```

      1           5           10           15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
      20           25           30
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
      35           40           45
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr
      50           55           60
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
      65           70           75           80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
      85           90           95
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
      100          105          110
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
      115          120          125
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
      130          135          140
Ala
145

```

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

```

nggatactca cgcccgccat catacgtggg atatcgttga gcaaatgcgt catgacgggg
50
tctccgtcgt gctcactacc cacaacatgg atgaggctca acggtgggct gatcacgtct
120
ggatcgtcga tcgcggcagg gtgcgaactc atggaactgt gccagagctc accgctgagt
180
cgagtttggg agatgtgttc ctactcaca ctagtaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgccact caggccgcac cggtcgtcgc acgcgtgcgt
300
aaccacgctc tcaccagggt gcgtctgggt atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccategggat catcgtcgcc gggcgcttcc tgggcggcgg ggtcggactg
420
acgatggacg tcttagcacc ctacgtgctg gcgctcgcca tctggtcgac atgtttcact
480
tcccaagcga tcattaccgg ttttgaacgc cgttacgggg tgctcgaaac attgtccgca
540
accgcgttag gtccgtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgtcatcacc tctttagcgc tgggctggca ccccccggg
660
tcgggcctgg cctggtcccc aaccctgggt agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcactctcgg actggccaac
780
ttgggtataca tc
792

```


<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaacaact cacagacatg ggcttccccg gagagccagc tgaggaggcc
 60
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccttc
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcgggc tcgtggaaga gcccaagcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccggggtg
 360
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtgagg cagcacaagc caggaccatg cagcagccgc cacagccacc agtcgagcct
 480
 cttaactctt cccagccagg tctcctgtct caagtgcctc agtttctatc ccctcaggtt
 540
 caagcacagc ttttgcagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc
 600
 tcgcccaatta atctccaaca tatgacgatg ttgaaccagc tctatcagct gcagctggga
 660
 taccaacggt tacaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa Arg Leu Ile Lys Gln Leu Thr Asp Met Gly Phe Pro Arg Glu Pro
 1 5 10 15
 Ala Glu Glu Ala Leu Lys Ser Asn Asn Met Asn Leu Asp Gln Ala Met
 20 25 30
 Ser Ala Leu Leu Glu Lys Lys Val Asp Val Asp Lys Arg Gly Leu Gly
 35 40 45
 Val Thr Asp His Asn Gly Met Ala Ala Lys Pro Leu Gly Cys Arg Pro
 50 55 60
 Pro Ile Ser Lys Glu Ser Ser Val Asp Arg Pro Thr Leu Leu Asp Lys
 65 70 75 80
 Asp Gly Gly Leu Val Glu Glu Pro Thr Pro Ser Pro Phe Leu Pro Ser
 85 90 95
 Pro Ser Leu Lys Leu Pro Leu Ser His Ser Ala Leu Pro Ser Gln Ala
 100 105 110
 Leu Gly Gly Val Ala Ser Gly Leu Gly Met Gln Asn Leu Asn Ser Ser
 115 120 125
 Arg Gln Ile Pro Ser Gly Asn Leu Gly Met Phe Gly Asn Ser Gly Ala
 130 135 140
 Ala Gln Ala Arg Thr Met Gln Gln Pro Pro Gln Pro Pro Val Gln Pro
 145 150 155 160
 Leu Asn Ser Ser Gln Pro Ser Leu Arg Ala Gln Val Pro Gln Phe Leu
 165 170 175
 Ser Pro Gln Val Gln Ala Gln Leu Leu Gln Phe Ala Ala Lys Asn Ile
 180 185 190
 Gly Leu Asn Pro Ala Leu Leu Thr Ser Pro Ile Asn Pro Gln His Met
 195 200 205
 Thr Met Leu Asn Gln Leu Tyr Gln Leu Gln Leu Ala Tyr Gln Arg Leu
 210 215 220
 Gln Ile Gln Gln Gln Met Leu Gln Ala Gln Arg Asn Val Ser Gly

225

230

235

<210> 1867

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1867

nnggggcacg gttagggccca gtgggcagag gggtagggga tatgcaggac cttccactgt
 60
 tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg
 120
 gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
 180
 tctggttggtc tggccctggt acccaacaac gtggtggcca aggccttggtg cccggagagg
 240
 ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
 300
 cctctctctgc ctccaccctt tccaccnng cagccccgcg ctctcccgca gaactctccc
 360
 caagccagac cgccctggacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
 420
 gcgaggtgct ttgcaccccc aagtgatcat gttcccgctc ccagcctgcc aagggtgatgt
 480
 ggagcttggg gagcggggtc tggcagggct tttccgga
 518

<210> 1868

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1868

Gln	Asp	Arg	Pro	Ser	Gly	Trp	Leu	Ala	Leu	Leu	Pro	Asn	Asn	Val	Val
1				5					10					15	
Ala	Lys	Ala	Leu	Cys	Pro	Glu	Arg	Phe	Leu	Gly	Ala	Ser	Arg	Gly	Leu
			20					25					30		
His	Arg	Thr	Trp	Val	Gly	Thr	Pro	Ala	Pro	Ser	Pro	Pro	Leu	Leu	Pro
			35				40						45		
Pro	Pro	Leu	Pro	Pro	Xaa	Gln	Pro	Pro	Pro	Leu	Pro	Gln	Asn	Ser	Pro
			50			55						60			
Gln	Ala	Arg	Pro	Pro	Gly	Pro	Ala	Ala							
65					70										

<210> 1869

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1869

acgcgtcacc ttctctgctgg agctactggg agccctcggg cacctgcgtg cattgcccga
 60
 ccgtgacatg ccgagcaccc aaaccacact gtggattcgc gagctgagcc gcatcgaccg
 120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgccca gcggtctact gccgtcgttg
 240
 cggccgcgagc ggaatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcacc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc
 360
 ccctcagagag ggagccagcg cggtcgcacac cgccgaggcg acactgtcct tacctgtggt
 420
 cgacaccgtc aacagg
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10					15	
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40					45			
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55				60					
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
	65				70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
			85					90					95		
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gccccagcctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtcgac gtcgacgggtg tttttcgccg gcgccggaat gtccaccgaa
 180
 tcaggtattc cggactttcg ctccgctggc gggctttaca ccactcagca tgacctgccc
 240
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatccgcg ggagttcttc
 300
 gactttctacc gcaacctacct catccatcct caggccaggc ccaatgctgg tcactgtgcg
 360

ttggttgccct tggagcaggc tggggaactt tcgacgatca ttaccagaa tattgacggc
 420
 ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggt gcac
 474

<210> 1872
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1872
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
 1 5 10 15
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
 20 25 30
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
 35 40 45
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
 50 55 60
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
 65 70 75 80
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
 85 90 95
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
 100 105 110
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
 115 120 125

<210> 1873
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 1873
 nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacggggagc
 60
 ggttcctctcg gggatctcgg aggggagacc cccaccgggg aggactggag gcagcgccctc
 120
 tccccccccc gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
 180
 ccgcaggggg cgcgctcaag gcaagggtccg cggcgagaac ggtgcccagt gggagcggaag
 240
 ggcgaggcca gcccttggtc ctggccgggc agttcgggtc ccgcctccaa atttttagtat
 300
 gcatatgagt caccaggaaa gttttttgaa acaaattt
 338

<210> 1874
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1874
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1875

```

aagcttggcg tacaagtgggt tcgtcgtttc tcaggtgggt gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttccg tgattttgga
120
aaattccacag aaccctgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gttaaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

<210> 1876

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1876

```

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```

115

120

<210> 1877

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1877

acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccatttaa
 60
 cgagggttatg caaattgcag aaatctctct atcggattgt ggctatatta ttcatctttt
 120
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
 180
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc
 240
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagttttag atactgcggg
 300
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
 357

<210> 1878

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1878

Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser
 1 5 10 15
 Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile
 20 25 30
 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp
 35 40 45
 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser
 50 55 60
 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn
 65 70 75 80
 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro
 85 90 95

<210> 1879

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 1879

nacgcgtgga tgctccttgg acggcttttt cgtggtagag gggtcccggt gogcgcgga
 60
 tccttgggaa gttagctgaag agaaggcaca ggaagagctt cctccactga tgggtctccct
 120
 gtccctccca caggctctga cgcccgctct gcggtctcgg tgtttgaaca ggccacagtc
 180
 caggagcgct tacattcagg agctccgctg agcacctgcc caaccaaact cagccctccg
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtggg taagtgaag gaggcctga aaccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaacagag ggagctatgc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtgtgta cggagtccca
 600
 gcccgcgaga aagtgtcttt ccccacggag cgactgtctc tgaggaggga gcgggtcttc
 660
 cgctgtggcg caggactcca caacctggc aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgacgc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc
 840
 gccaacagcg gcaacgccat caagcccgct tccttcaccc gagacctgaa aaagatcgcc
 900
 cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tctgcggtta caccatcgac
 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagtgg atcgtcaaac gcaggctact
 1020
 accttggtcc atcaaatctt tggagggtat ctcatatcac gc
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met Pro Ile Val Asp Lys Leu Lys Glu Ala Leu Lys Pro Gly Arg Lys
 1 5 10 15
 Asp Ser Ala Asp Asp Gly Glu Leu Gly Lys Leu Ala Ser Ser Ala
 20 25 30
 Lys Lys Val Leu Leu Gln Lys Ile Glu Phe Glu Pro Ala Ser Lys Ser
 35 40 45
 Phe Ser Tyr Gln Leu Glu Ala Leu Lys Ser Lys Tyr Val Leu Leu Asn
 50 55 60
 Pro Lys Thr Glu Gly Ala Ser Arg His Lys Ser Gly Asp Asp Pro Pro
 65 70 75 80
 Ala Arg Arg Gln Gly Ser Glu His Thr Tyr Glu Ser Cys Gly Asp Gly
 85 90 95
 Val Pro Ala Pro Gln Lys Val Leu Phe Pro Thr Glu Arg Leu Ser Leu
 100 105 110
 Arg Trp Glu Arg Val Phe Arg Val Gly Ala Gly Leu His Asn Leu Gly
 115 120 125
 Asn Thr Cys Phe Leu Asn Ala Thr Ile Gln Cys Leu Thr Tyr Thr Pro
 130 135 140
 Pro Leu Ala Asn Tyr Leu Leu Ser Lys Glu His Ala Arg Ser Cys His


```

145             150             155             160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
             165             170             175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
             180             185             190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
             195             200             205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
             210             215             220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
             225             230             235             240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
             245             250

```

<210> 1881

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1881

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natcaccatg gatggacgcc ggcaaaagcaa catcaatcga tgtaagacca cagacatctc
60
aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
120
tcaacacgaa gattaacgac gtctacaacc ctctacaaca caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgc acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
358

```

<210> 1882

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1882

```

Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
1             5             10             15
Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
20             25             30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
35             40             45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
50             55             60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65             70             75             80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
85             90             95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
100            105            110
Ile Arg Arg

```

115

<210> 1883

<211> 367

<212> DNA

<213> Homo sapiens

<400> 1883

```

ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggtc gctcagactt
60
gggtgtgggag aatgatacta agacaccaga catcacatcc attgctccca tccccactat
120
tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tgggtgcctcc
180
tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
240
gagggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
300
atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatacgctgg
360
cgatttn
367

```

<210> 1884

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1884

```

Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
1           5           10           15
Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
20           25           30
Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
35           40           45
Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
50           55           60
Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
65           70           75           80
Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
85           90           95
Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
100          105          110
Met Pro Ile Ala Gly Asp Xaa
115

```

<210> 1885

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1885

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naccggtatt cgcaagaat gtctttgcgg cacagagaca gtcgctgtcc tcgacaccat
60

```

gttcgacgat ctccgcatgt tgggaaccgg gtgattttctc gectgcccgg cacctcgtgg
 120
 ctgcgtagta cagctgctgt tgccgcccgg gccgcgaccg gtaccggggt ccaaccactg
 180
 aactgggtgga tcctcgatcat tcccgggtctc gctgcgctca tcctgctggg gcgcaacgcc
 240
 actggctcggg ccgcggcagg actgggggat ctcttcggca tcggtctggt taccaccacc
 300
 atttctctggg taggcgcat cgcccccgg gtggcgatac ttctcatcgc tgtcatggcg
 360
 ttgtgggtgc tgctggccgg gtggacgatt cg
 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

Xaa	Ala	Tyr	Ser	Gln	Arg	Met	Ser	Leu	Arg	His	Arg	Asp	Ser	Arg	Arg
1				5					10				15		
Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
		20						25				30			
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
		35					40				45				
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50					55				60					
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65				70					75					80	
Thr	Gly	Arg	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu	
			85					90					95		
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100					105					110		
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
			115				120						125		
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

cgcgagtgca ttcggacctt tgaggacggt gccaaagctc tcaatgggga ccagccgate
 60
 gactctcttg tgacgggaac tttatatccc gatgtcgctg agtctggtgg cggtaggggc
 120
 gctgcccaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt
 180
 ctcggtgagc cattgcgcac cctctttaag gacgaggtgc gagecgtcgg actcgaacct
 240
 ggtctgcccc aggacatcgt ctggcgctcag ccttccccgg gccgggggct ggctatccgc
 300

attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcaactgccga tgccatcacg
 360
 cgt
 363

<210> 1888
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1888
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly
 1 5 10 15
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val
 20 25 30
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 1889
 gcaccagatc tgctcatggc gcgcattgac acggcaacgc agtcgatccg gcttgggtct
 60
 ggttgggtga tggccatgca ctacgggtcg ctgcaaatag cggaaacggtt ttccagccctc
 120
 acagcgctct tcggtgatcg tatcgacatg gggctgggcc gggctccccc cggtgacatg
 180
 ctctccgcc atgccctcaa tcaggggcag gtcattccgc ctgaggccat taattccctc
 240
 atcgccgaaa cggtagggtt cgtgcgcgaa atgctaccgt cgaagcatcc tgacgcaag
 300
 gtcgtcgtga ccccgccagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
 360
 cagtcagcag cgtgggtcgg tgagcagggt atggactacg cctacgccca gtttttcacc
 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc
 480
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga
 530

<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
 1 5 10 15
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
 20 25 30
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
 35 40 45
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
 50 55 60
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
 65 70 75 80
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
 85 90 95
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
 100 105 110
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
 115 120 125
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
 130 135 140
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
 145 150 155 160
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
 165 170 175

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891
 agatctcagg gagacagagg ggcccgaggat aggaagaata tgtgggcacc tctccacag
 60
 tctctcatct gcacaaggct acccactctg cagatggccc ctgcttcgag agagatccag
 120
 cgtcaattta cagaggcagc ccagcttctc atcaactttc tggcctggct taacgggtgta
 180
 atgggcaggg ggcaaggcct tgaccacact catgtttctc cccgggcctc ctccactctg
 240
 ggattttgta cgggtatggg gaggcactac gggtgcagat ttagcttttc agcgtggata
 300
 caagcaccca agtgtccag accacagcag aaaccgtgtt gctgcggttt ccaacctgct
 360
 gatttggtct cttgctgccg ttctgaccaa cagaattgct actgactgac aaatcccttg
 420
 tgc
 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1          5          10          15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
 20          25          30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
 35          40          45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
 50          55          60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
 65          70          75          80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
 85          90          95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
115          120

```

<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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accggtgggtg ctgaaccggc ccgagttgcc ctctctagcc ggatatacgt cgaggggacgt
60
catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccagct cggggctggt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccagatt taagcctggt
180
cgggggcac ccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tgggtgggtat agcgagtatg tcatgattac cggtcatcgc
300
tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag
360
gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct ccctcactcg
420
accgaagctg acgtcggtaa ggcctggcag gccatgctcg cagcagtcgc cgcagtggcac
480
gatttagacc cccgctttaa caccgagatg gagaaactta tcgatttcgt caccgctgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatccg ggatgtgagt gccaggggta tcgatcccg gttccggacc ctccacgac
660
atcaaatcca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcgggat tgcgtggggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttcgcgtgc tgacctggcc tgggtcatcg
840

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accgccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

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Thr Gly Gly Ala Glu Pro Ala Arg Val Ala Leu Pro Ser Arg Ile Tyr
 1             5             10             15
Val Glu Gly Arg His Asp Ala Glu Leu Val Glu Lys Ile Trp Gly Asp
 20             25             30
Asp Leu Arg His Val Gly Val Val Glu Tyr Met Gly Gly Met Asp
 35             40             45
Asp Leu Val Gly Ile Val Ala Glu Phe Lys Pro Gly Pro Gly His Arg
 50             55             60
Leu Gly Val Leu Val Asp His Leu Val Ala Asp Thr Lys Glu Ser Arg
 65             70             75             80
Val Ala Asp Glu Val Arg Arg Gly Gly Tyr Ser Glu Tyr Val Met Ile
 85             90             95
Thr Gly His Arg Phe Ile Asp Ile Trp Gln Ala Ile Lys Pro Gln Arg
100            105            110
Ile Gly Arg Gln Glu Trp Pro Glu Val Pro Met Asp Glu Asp Phe Lys
115            120            125
Leu Gly Thr Leu Lys Arg Leu Gly Leu Pro His Ser Thr Gln Ala Asp
130            135            140
Val Gly Lys Ala Trp Gln Ala Met Leu Ala Arg Val Arg Asp Trp His
145            150            155            160
Asp Leu Asp Pro Arg Phe Asn Thr Glu Met Glu Lys Leu Ile Asp Phe
165            170            175
Val Thr Arg Asp His Val Asp Glu Leu Asp Asn Gly Glu Met Ala
180            185            190

```

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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nntcatgatt ttggagggtg ggtgtacct cctgaacttc tagctttcaa gttgtggctg
 60
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120
cttccccctgt tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac
180
acaacttttag aaagtgtcct gcagaacaaa aaggctacac aaaagccac tggtcttcaa
240
taccctcaag tggatggcag aggcctctgt tgaaagtggg caatttgcaa tctttgcatt
300
aggattttcag atgcatgccg ggtttccact gattgccaga actcgagatc actacacatg
360
gatcccccata atcaacatgg cagtggcagt tcgttagttg tgatccagca gccttctttg
420

```

gatagcgc agagattaga ctatgagaga gagattcagc ctactgctat ttgtgcctta
480
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtggtgaaa
540
agaactgctc ctccgacagc accaagacaa gaaaagcatg aaaggactca tgaatcata
600
ccaattaatg tgaataataa ctacgagcac agacacacaa gccacctggg acatgcagta
660
ctcccaagta atgccagggg ccccatcttg agcagatcaa ccagcactgg aagtgcagcc
720
agctctggga gcaacagcag tgctctcttc gaacagggac tggttaggaag gtcaccacca
780
accagaccag tccctgggtc taggtctgaa agggcaatcc ggaccagcc caagcaactg
840
attgtggatg acttgaaggg ttccttgaaa gaggacctga cacagcaca gttcatttgt
900
gaacacgttg ggaagtgcga gtgtggagaa tgctactgct ccaggacct accatctgt
960
ttggcctgta accggcagtg cctttgctct gctgagagca tgggtgaata tggaaacctgc
1020
atgtgcttat tcaagggcat ctctaccac tgctccaatg acgacgaagg ggaatctcat
1080
tcagataata ctgtctcctg ttcacaatca cactgctgct ctgataacct gtgtatggga
1140
gccatgtctt tatttttacc ttgcttactc tgttatcttc ctgctaaagg atgcctgaag
1200
ctgtgcagga ggtgttatga ctggatccat cggccagggt gcagatgtaa gaactccaac
1260
actgtctatt gtaagctgga gagctgcccc tcccggggtc agggtaaacc atcatgattt
1320
ttggagggtg gttgtacctc ctgaaacttc agctttcaag ttgtggctgt tttttgttt
1380
tgtttttgtt tttgtttctt ttagaatttt tccctgttcc caacctcttc tcccctgtt
1440
gccaaaggtc aactcatgga tttttctctt tccatcatgga tgatcttcag caagagtggga
1500
ctgggaagct gcacctggct cccactttca acaagacctc ctgccatcca ctgagggtga
1560
ttgagagcca tggggctttt gtgtagcctt ttgtttctgc aagcaacttc ctaaagtgtt
1620
gtacatgaac atacaccac atccagacta cagtgtatta gagggtgttt gattgggtac
1680
cgtgggagca gggaaattgg ttttttaaaa agcaactgtt taattgctta aataagctat
1740
gtattaaatc tgcctccagt tagggtatc ttcctagcat agggccctta agtagcatgg
1800
gggatataat ttttgcata acgtaaaaat tttcctttaa caactgccc ctcccttctc
1860
cttcaagggt ctttccccct cagttttgtt gttgtcttac tctggagatg ccaagtgtat
1920
ttttctcttc tatgtaattt tagattcgcc ttacaatgta aatcttcaca ttggagataa
1980
tattgggttg accttgccca tcttcaactc agccttcgta ttgtggaagg actcagccac
2040

ctctcttctt caccctatgc ttctcaccaa atttttgttg tcattgaggg cacttgagata
 2100
 actcaagttg atatttatag ctgatcaatc tatatgtgtc acagaactat gctgcctaaa
 2160
 gtgatcttgg ctcttaaatg gtcccttttg ccccttggat agttaacagc tgagtaattc
 2220
 taatctcttc tegtgtttcc ttgccttaac cacaaattgt ggtgcttttt gtatatttta
 2280
 tgtataaatc acaaagttga attctgacta tttttaagac aaaagctctgt taaacttttt
 2340
 tattgtaaag aatatttatt atgcgaatct ctattatttt atgggtattta ttgcaaaaga
 2400
 ctgttgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataaagg
 2460
 tgacacgaag aaagtacata tgttaactat aatgcagaaa atatattaat taatgaaaaa
 2520
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa
 2555

<210> 1896
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1896
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg
 1 5 10 15
 Thr Leu Pro Ser Cys Leu Ala Cys Asn Arg Gln Cys Leu Cys Ser Ala
 20 25 30
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile
 35 40 45
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn
 50 55 60
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met
 65 70 75 80
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala
 85 90 95
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg
 100 105 110
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu
 115 120 125
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser
 130 135

<210> 1897
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 1897
 cgtcatggct gctacgtgtg cggnaagagc tttgctggc gctccacact ggtggagcac
 60
 gtctacagtc acactggcga gaagcccttc cactgcactg actgcggcaa gggcttcggc
 120

cacgcttct ccttgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt
 180
 ctggagtgtg gccgggcctt caccgacgac tcggcgctga ctctgcacct gcgcgtccac
 240
 accggcgaga aaccttatgg ctgcgcccgc tgtggcgccc gcttcagcca gagctctgcc
 300
 ctctaccagc accggcgcggt gcacagcggc gagacccct tcccctgccc ggactgtggc
 360
 cgccgcttcg cctaccacct ggacctgccc cgccacgtgc gcattccacac gggcgagaag
 420
 cctaccctt gccacagactg tggcgccgc ttttctctct cctccctgtg ggtcagtcac
 480
 cggcgggcac actccggcga gtgcccctat gtttgtgacc agtgtggcaa acgtttctcc
 540
 cagcgcaaga acctctccca gcaccaggtc atccatacag gggagaagcc ctatcactgc
 600
 cctgactgtg gtgcgtgctt ccggaggagc cggtccttgg ccaatcaccg gaccacacac
 660
 acagggtgaaa aaccccacca gtgccctagc tgtggacgtc gcttcgcta cccctccctg
 720
 ctggccagcc accggcgcggt gcactcgggc gagcgccct atgcctgcga cctttgtccc
 780
 aagcgttttg ctacgtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag
 840
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca
 900
 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
1			5					10					15		
Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
		20						25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
		50				55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70					75					80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90					95		
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
130					135						140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

```

145          150          155          160
Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
          165          170          175
Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
          180          185          190
Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
          195          200          205
Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
          210          215          220
Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
          225          230          235          240
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
          245          250          255
Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
          260          265          270
Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
          275          280          285
Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
          290          295          300
Arg Pro Gln Thr Val Ala Leu Asp
305          310

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<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

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aaatttcct ccctaattgg caaggtgcaa gccctggaac agcgcgacca gctgctggag
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acacgctgga gcttctctgca gggccaggac tcagccatct tcgacctcgg gcattcttat
120
gaggaaatat caggccggct cgggagggaa ctggggccaaa gggacaggaa ccgggggcag
180
ctggaggcca cctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgcac agacatggag ttacaccttg ttcagctgaa gaaggacctg
300
gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
360
gtggagttag tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgacctcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
480
gaggaggtga aggccagta tgacgccg
508

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<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

```

Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

```

```

1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
65           70           75

```

<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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acgcgtggac cagcatgctgc cggatcgggc tcggcgccat gcacacctcg gacctggcgg
60
cgggtgttcgg cgatgcgaag gcaacccgcg cttccaagtt cgacccttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctcttc ttccacaacg
180
cgcatccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccgcgcgcg
240
cgaccgcgat cttcgcggcg aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgaggcca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

```

<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

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Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

```

```

      115              120              125
Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys
      130              135              140
Glu Ile Leu Ile Glu Gly Gly
145              150

<210> 1903
<211> 531
<212> DNA
<213> Homo sapiens

<400> 1903
ccggcgaggg agctgttccg ggacgccgcc tccccgcgcg cggaactctc gctcttctgc
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gacttgtcta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga
120
atttgtgcca acccccgctt gtttccaaat gaccaaCggg aagggcagggt gaagcagggg
180
ctgctggggg attgctggtt cctgtgtgcc tgcgcgcgcg tgcagaagag caggcacctc
240
ctggaccagg tcattcctgc gggacagccg agctggggcg accaggagta ccggggcttc
300
ttcacctgtc gcttttgga cgtttggacgg tgggtggagg gtccatgggt cccttcgagc
360
ccctgtgggc ggggcagggt gcggatgccc tggtagacct gaccggcggc ctggcagaaa
420
gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
480
agcaccaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgatc a
531

<210> 1904
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1904
Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser
1      5      10      15
Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp
20     25     30
Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
35     40     45
Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp
50     55     60
Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
65     70     75     80
Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
85     90     95
Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
100    105    110
Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg
115    120    125
Met Pro Trp Trp Thr

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130

<210> 1905

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1905

acgcgtgggc tgatcgccat gctctgggca ctgggggtgg tggcggaagt gctgatgttc
 60
 ctggccatga gcggatcct cgcgcgcttt tcgggtccgtc ggggtgctgt gccagatttc
 120
 ctcttgcccg ccgtgcgctg gttgctgctg ggcgcggttg ccgatcacct ggcggtgctg
 180
 ttgttcgccc aggtgctgca cgcggcgacc ttgccagct ttcacgcctc tgccattcat
 240
 ttctgcaac gtagcttcgg cgcgcgcenca gcaaggccag ggcaggcgtt atacgctgca
 300
 ctggccggga cgggcggggc tttgggcgcg ttgtacgccc gttatagctg gaacagcctg
 360
 gggccgacct ggactttcag catcgtt
 387

<210> 1906

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1906

Thr	Arg	Gly	Leu	Ile	Gly	Met	Leu	Trp	Ala	Leu	Gly	Val	Val	Ala	Glu
1			5					10				15			
Val	Leu	Met	Phe	Leu	Ala	Met	Ser	Arg	Ile	Leu	Ala	Arg	Phe	Ser	Val
		20						25				30			
Arg	Arg	Val	Leu	Leu	Ala	Ser	Phe	Leu	Leu	Ala	Ala	Val	Arg	Trp	Leu
		35				40						45			
Leu	Leu	Gly	Ala	Leu	Ala	Asp	His	Leu	Ala	Val	Leu	Leu	Phe	Ala	Gln
		50			55					60					
Val	Leu	His	Ala	Ala	Thr	Phe	Ala	Ser	Phe	His	Ala	Ser	Ala	Ile	His
		65			70				75					80	
Phe	Val	Gln	Arg	Ser	Phe	Gly	Ala	Arg	Xaa	Ala	Arg	Pro	Gly	Gln	Ala
			85					90					95		
Leu	Tyr	Ala	Ala	Leu	Ala	Gly	Thr	Gly	Gly	Ala	Leu	Gly	Ala	Leu	Tyr
		100					105					110			
Ala	Gly	Tyr	Ser	Trp	Asn	Ser	Leu	Gly	Pro	Thr	Trp	Thr	Phe	Ser	Ile
		115				120						125			

Val

<210> 1907

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1907

acgcgtttcg accagegcat ccgtgtcggc ggcattggcg aaatcgtcgg ctccgacaag
 60
 aagctgcgcg ccgcgcgcgc cgaaacgctc gagatgtcgg tcaacagacct gttcccgggc
 120
 ggcggcgaca cgtcgaaggc cagcttctgg acgggcctgc gcccgatgac gccggacggc
 180
 acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg
 240
 ctccggtgga caatggtgtg cggctcgggc caactgtcgg ccgaacctgat ctccgggaag
 300
 atgcccgcca tcacggcga cgacctgtct nnc
 333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
1				5					10				15		
Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25				30			
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr	
		35				40					45				
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65				70					75				80		
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85					90					95		
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105					110		

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

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 180
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 240
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 420

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480
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660
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1980
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2040

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 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
1				5					10					15	
Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
		20						25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55				60					
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65				70					75					80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90					95	
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
			100				105					110			
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
		115				120					125				
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130				135					140					
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145				150					155					160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

165 170 175
 Gly Thr Gly Gly Phe Ser Ala Thr Phe Asp Tyr Gln Gln Ala Phe Gly
 180 185 190
 Asn Ser Thr Gly Gly Phe Asp Gly Gln Ala Arg Gln Pro Thr Pro Pro
 195 200 205
 Phe Phe Gly Arg Asp Arg Ser Pro Leu Arg Arg Ser Pro Pro Arg Ala
 210 215 220
 Ser Tyr Val Ala Pro Leu Thr Ala Gln Pro Ala Thr Tyr Arg Ala Gln
 225 230 235 240
 Pro Ser Val Ser Leu Gly Ala Ala Tyr Arg Ala Gln Pro Ser Ala Ser
 245 250 255
 Leu Gly Val Gly Tyr Arg Thr Gln Pro Met Thr Ala Gln Ala Ala Ser
 260 265 270
 Tyr Arg Ala Gln Pro Ser Val Ser Leu Gly Ala Pro Tyr Arg Gly Gln
 275 280 285
 Leu Ala Ser Pro Ser Ser Gln Ser Ala Ala Ala Ser Ser Leu Gly Pro
 290 295 300
 Tyr Gly Gly Ala Gln Pro Ser Ala Ser Ala Leu Ser Ser Tyr Gly Gly
 305 310 315 320
 Gln Ala Ala Ala Ala Ser Ser Leu Asn Ser Tyr Gly Ala Gln Gly Ser
 325 330 335
 Ser Leu Ala Ser Tyr Gly Asn Gln Pro Ser Ser Tyr Gly Ala Gln Ala
 340 345 350
 Ala Ser Ser Tyr Gly Val Arg Ala Ala Ala Ser Ser Tyr Asn Thr Gln
 355 360 365
 Gly Ala Ala Ser Ser Leu Gly Ser Tyr Gly Ala Gln Ala Ala Ser Tyr
 370 375 380
 Gly Ala Gln Ser Ala Ala Ser Ser Leu Ala Tyr Gly Ala Gln Ala Ala
 385 390 395 400
 Ser Tyr Asn Ala Gln Pro Ser Ala Ser Tyr Asn Ala Gln Ser Ala Pro
 405 410 415
 Tyr Ala Ala Gln Gln Ala Ala Ser Tyr Ser Ser Gln Pro Ala Ala Tyr
 420 425 430
 Val Ala Gln Pro Ala Thr Ala Ala Ala Tyr Ala Ser Gln Pro Ala Ala
 435 440 445
 Tyr Ala Ala Gln Ala Thr Thr Pro Met Ala Gly Ser Tyr Gly Ala Gln
 450 455 460
 Pro Val Val Gln Thr Gln Leu Asn Ser Tyr Gly Ala Gln Ala Ser Met
 465 470 475 480
 Gly Leu Ser Gly Ser Tyr Gly Ala Gln Ser Ala Ala Ala Ala Thr Gly
 485 490 495
 Ser Tyr Gly Ala Ala Ala Ala Tyr Gly Ala Gln Pro Ser Ala Thr Leu
 500 505 510
 Ala Ala Pro Tyr Arg Thr Gln Ser Ser Ala Ser Leu Ala Ala Ser Tyr
 515 520 525
 Ala Ala Gln Gln His Pro Gln Ala Ala Ala Ser Tyr Arg Gly Gln Pro
 530 535 540
 Gly Asn Ala Tyr Asp Gly Ala Gly Gln Pro Ser Ala Ala Tyr Leu Ser
 545 550 555 560
 Met Ser Gln Gly Ala Val Ala Asn Ala Asn Ser Thr Pro Pro Pro Tyr
 565 570 575
 Glu Arg Thr Arg Leu Ser Pro Pro Arg Ala Ser Tyr Asp Asp Pro Tyr
 580 585 590
 Lys Lys Ala Val Ala Met Ser Lys Arg Tyr Gly Ser Asp Arg Arg Leu

```

          595                600                605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe
   610                615                620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp
   625                630                635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu
          645                650                655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met
   660                665

```

```

<210> 1911
<211> 339
<212> DNA
<213> Homo sapiens

```

```

<400> 1911
ncgggggtggc oggaatctac tcctagtgtc cagcttccct cctctttgtg ctttccctcg
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  120
cgcatcgacg atgaaagctt cctccgccca gttgagccga cccaagccgc acgtggggcg
  180
gcagcgcata gccagcagcg gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt
  240
gaagcactgg tgggtcccgct cgtcattgag gtggagggga aattcgcagg gcaggttaacc
  300
ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
  339

```

```

<210> 1912
<211> 113
<212> PRT
<213> Homo sapiens

```

```

<400> 1912
Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
   1           5           10           15
Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
   20          25          30
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
   35          40          45
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala His Ser
   50          55          60
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
   65          70          75          80
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
   85          90          95
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
  100         105         110
Trp

```

```

<210> 1913
<211> 767

```

<212> DNA

<213> Homo sapiens

<400> 1913

gtgcacaccg gttcacagcg atatttcagg caaattgaaa gcgtcagttc gataggctga
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 atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggaggacg tccgatggca
 120
 gcgcagctac tcgatctcgt cctcccagcc ttgtccgaaa cctccgccaa tctcatcggc
 180
 cagagggtgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
 240
 tcccagctgt cgggcagctac aaggcacctc ggatcaagct ttectggcgt gaactgggtcc
 300
 tgggtaccat caatgccacc cacctgcact ccaatcccc acaagtgtgc caacacgccc
 360
 cagaattgcg tcgcagccac ccggacettg ccatcaagggt ggcccgcgcc accggaccag
 420
 caccggctct cctcaacctc gtgcatacgc gattgcgtct gcgagctcat cgcgtccatg
 480
 cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
 540
 caatgctgtc caggctgacc cggtgtgtgt cccagcacca ccaccttcg gtccgcagtcg
 600
 ccaccaatcg tgggtggggt actgcggtcg aggaggtcgt cgcgcgctg cgacaggagg
 660
 ggcgcgctca tatcgagtg ggaagcctgt ggatttcgca cgacgagaat ttccgcatte
 720
 atactcgcca ggetttgcat gccgggtgcc aggttgtgcg cgcaccg
 767

<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

Met Ser His Leu His Pro His Ile Glu Ser Thr Val Ser Phe Val Pro
 1 5 10 15
 Ala Val Gly Gln Tyr Lys Ala Pro Arg Ile Lys Leu Ser Trp Arg Glu
 20 25 30
 Leu Val Leu Val Pro Ile Asn Ala Thr His Leu His Ser Asn Pro Pro
 35 40 45
 Gln Val Val Gln His Ala Ala Glu Leu Arg Arg Ser His Pro Asp Leu
 50 55 60
 Ala Ile Lys Val Ala Arg Pro Thr Gly Pro Ala Pro Val Leu Leu Asn
 65 70 75 80
 Leu Val Asp Thr Arg Leu Arg Leu Ala Ala His Arg Val His Ala Gln
 85 90 95
 Glu Leu Asp Ser Leu Val Leu Ser Ser Pro Asp Gly Gly Asp Leu Arg
 100 105 110
 Gly Ser Ala Met Leu Ser Arg Leu Thr Arg Leu Trp Ser Gln His His
 115 120 125
 His Leu Pro Val Arg Ile Ala Thr Asn Arg Gly Gly Ala Thr Ala Val

```

      130              135              140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala
145              150              155              160
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr
      165              170              175
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro
      180              185              190

```

<210> 1915

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1915

```

acgcgtccca ggccccacag gccccctctg gctctcaggc cccccgccca gtggccagga
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aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
120
ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
180
tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag
240
gtgtcatgtg ctatgtctcag gggggcttgg caccatggga aaccacacca gaacacatgg
300
agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac
360
ccaccgtgag ggaccctctg gcctcaccgc gaacatccac agtgtggggac tgctgcgtct
420
caccactgc acctgccctg caggatccct gactctcacc cgccgcaccc gccgtgcggg
480
atccctgagt ctcacccgcc gcaccgcgcg tacctgcgcg atccgccatg cgggacccct
540
gcgtctcacc caccgcaccc gccgtgcggg a
571

```

<210> 1916

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1916

```

Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
1      5      10      15
Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
20     25     30
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
35     40     45
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
50     55     60
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
65     70     75     80
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
85     90     95
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

```

100 105 110
 Pro Pro His Pro Pro Cys Gly
 115
 <210> 1917
 <211> 360
 <212> DNA
 <213> Homo sapiens
 <400> 1917
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 gatattgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt
 120
 catccctatg gcccggtgaa gtcggtaaag gtacgaggtc cggccggcca cccagccccg
 180
 gatttcgccc cgggatgggt gctcgaccgc ttggcagttc ccgtacatcg cacagtggcc
 240
 gactcccaaa ggagacactt cccggtgact catttgagtc tcaatcggga gacaaccac
 300
 gtacacgtcg atgtcattga cgagcgacgc gttcgtgtat gtgttcggg ttcgcggaa
 360
 <210> 1918
 <211> 120
 <212> PRT
 <213> Homo sapiens
 <400> 1918
 Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
 1 5 10 15
 Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
 20 25 30
 Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
 35 40 45
 Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
 50 55 60
 Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
 65 70 75 80
 Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
 85 90 95
 Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
 100 105 110
 Val Cys Val Pro Gly Ser Pro Glu
 115 120
 <210> 1919
 <211> 354
 <212> DNA
 <213> Homo sapiens
 <400> 1919
 nmcggcgca gctgtgtcca ctgcgtgtc cctgccacct cggccatctg cctctctctt
 60

ccaggctgca gccatccctc ctgactgct gaggcctggc cagcgcgcatc ncgccacgc
 120
 ccacctccat cctctttgcc cettactaaa cactggggagc ccgcccggccc ggcagaggcc
 180
 aggcagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccccacc
 240
 tacgcactta caaagtgcag gccacogccc agccccacct ccagacacag gcggaggcca
 300
 agctcgggg caccgtatca tcccgtgccg tctccacct acccctgccca attg
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa Gly Arg Ser Cys Val His Cys Ala Val Pro Ala Thr Ser Ala Ile
 1 5 10 15
 Cys Leu Ser Leu Pro Gly Cys Ser His Pro Ser Cys Thr Ala Glu Ala
 20 25 30
 Trp Pro Arg Ala Ser Arg Pro Arg Pro Pro Ser Ser Leu Pro Leu
 35 40 45
 Thr Lys His Trp Glu Pro Ala Arg Pro Arg Gln Ala Arg Pro Ala Gly
 50 55 60
 Arg Cys Arg Arg Thr Ala Gln Arg Ile Gln Gln Cys Lys Tyr Pro Thr
 65 70 75 80
 Tyr Ala Leu Thr Lys Cys Arg Pro Pro Pro Ser Pro Thr Ser Arg His
 85 90 95
 Arg Arg Arg Pro Ser Ser Arg Ala Pro Tyr His Pro Val Pro Ser Pro
 100 105 110
 Pro Tyr Pro Cys Gln Leu
 115

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gggggtggga gaagagcaag aacggaaact
 60
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccacctc
 240
 cacactgccc accccatcct tctctcccag tctcaactcc atcgaagcct ccagatgac
 300
 ttcatgtggg gacaggagaa ctacagatca tggctgagaa gggcgcnctg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1 5 10 15
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
 20 25 30
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
 35 40 45
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
 50 55 60
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
 65 70 75 80
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
 85 90

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923
 nattnaatta tgggtgagaaa aggccttatgc gttgcattgc tcgtgcttgc cacactgtca
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 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaaatgacc
 120
 cagtatcaat atactgatca agagggaagc aaaggccatt catttaaatct gcgattgttc
 180
 ccgttgcctt taaacggaag tatcttaaat gacttttatt ggaaggcaca ggcccaattc
 240
 aatggaaaca catcgacatt gggaaagcagt ccacgtcttg tagacctatt tgtagagtgg
 300
 cagaaatatg attatttcaa ggtgaagtta ggccagttta agcgaccatt cactgttgaa
 360
 aatcccag
 368

<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1 5 10 15
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
 20 25 30
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
 35 40 45
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
 50 55 60
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn


```

65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
              85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
              100              105              110
Pro Phe Thr Thr Phe Glu Asn Pro
              115

```

<210> 1925

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1925

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actagtggtt ccagcaggca gcgatttaat tgttcttgca ttgaaaccca gtgtggcaag
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120
gggctcccc caggctgtga gcagataaag ccttgctgtg cttcacaaca gtgactgggt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtctca caccagatgt ggcagccctc
240
ccacgccagg ctgtgtgggt cagccgctgt gtatatgtgt ccatcgtgtg tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct ggttccttag agcaaatgga agcaccaggc tctgggtcac
420
ggcgcgcg
427

```

<210> 1926

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1926

```

Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
1              5              10              15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
20              25              30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
35              40              45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
50              55              60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65              70              75              80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
85              90              95
Asn Arg Cys Leu Leu Glu Thr Leu
100

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<210> 1927

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1927

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcgatgaa
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 acatctgcttt tgacgggtgga ggcaaccagt agcatcaggg aaaaagtgtg tgaagatcct
 120
 ctttgttaact tccactcccc aaacttctctg aggatctcag aggtggaaat gagaggttcc
 180
 gaggatgcgg cagctggaac agtattgcag cggtgatcc aggaacaact gcggtatggc
 240
 accccaacog agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa
 360
 atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagnn tgganncaat
 420
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 480
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 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5				10					15		
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35					40				45				
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
	50					55				60					
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65					70				75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
				85				90					95		
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
			100					105					110		
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
		115					120					125			
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
		130				135					140				
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145					150					155				160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
				165				170							

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

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nnccgcgag actcaggggc tggggtcctt cttccccaag aggcctgact gcctgggtgt
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tctccaggtg catgtccttc aaggagaaat acacttctctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggagccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggccc ctgagtcacca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
360
tcacttttct tttcttctt ggcccactc tctcttttga gggctctctg agggcccacg
420
tccatggcgt cacagatgta tgcagcaag ccattgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttgggtgg cacttctcca gaagcaaat gttgatcagg cccaacctg
540
agtgtctgagc agtctcagtc tctcctctct gccagccgc cagggtccca cctcaggct
600
ccttggtagg gaccgagggg ccggcgcgtt gagccccgt caatgcgcgc ttctcgtgga
660
agcggctggg gctgagcttg cgcagagtg cgacctccc aggcaccgcc ttctcgtgct
720
tccagctctg ctgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
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840
caa
843

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<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

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Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1          5          10          15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20          25          30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35          40          45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50          55          60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65          70          75          80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85          90          95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

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100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120

<210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 1931
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 120
 gaagaggagg tggttagtgg tgtcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttctctac taggacagct tcctcccagc ccagtgtggc cagcctgggt tcctcggtga
 240
 ccagacacgt ggccatgaat ttctcagtggt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggctga ctttggaaac aggaggtccg tgggtcgtgg aataagaaaagg ggcacatcgg
 360
 ttgcagagga agggaaaggaa gccacaggct gccttgggga gctttctgaa aggcaggctc
 420
 gatcatgcct ctctgggcta cgggtctctc acggtggctc ctggttgga ctaagtggtt
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggcccccag
 540
 cagggtctgcc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagcgtcgcc ctcttcaggg agcctttcat aaccacctct cccttccat ggctaagaat
 660
 gaggttgagc aactgcagga ctggggacct tgttctcgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1933

ggcgccgagc tgtgggcggc catggagcgc atgcctgcgc acctgattat cctcgacctg
 60
 atgctgcgcg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgcaaca
 120
 ccagtgatca tgctgaccgc catggggcga ctgagtgatc gcgtgggggg cctggaaatg
 180
 ggcgcgatg actacctgaa caaaccttct gatgccgtg aattacttgc ccgggtgcgc
 240
 gctgtactgc gtcggcgctg tgaataccga ccgacgttgg gcgacgtgct gcgcc
 295

<210> 1934

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1934

Gly	Ala	Glu	Leu	Trp	Ala	Ala	Met	Glu	Arg	Met	Pro	Ala	Asp	Leu	Ile
1			5						10				15		
Ile	Leu	Asp	Leu	Met	Leu	Pro	Gly	Asp	Asn	Gly	Leu	Leu	Cys	Gln	
			20					25				30			
Arg	Leu	Arg	Gln	Gln	Tyr	Ala	Thr	Pro	Val	Ile	Met	Leu	Thr	Ala	Met
			35				40					45			
Gly	Glu	Leu	Ser	Asp	Arg	Val	Gly	Gly	Leu	Glu	Met	Gly	Ala	Asp	Asp
	50					55					60				
Tyr	Leu	Asn	Lys	Pro	Phe	Asp	Ala	Arg	Glu	Leu	Leu	Ala	Arg	Val	Arg
	65				70				75				80		
Ala	Val	Leu	Arg	Pro	Ala	Cys	Glu	Asn	Arg	Pro	Thr	Leu	Gly	Asp	Val
			85						90				95		

Ser Arg

<210> 1935

<211> 298

<212> DNA

<213> Homo sapiens

<400> 1935

accggtgtgg cgggcgcggc cttcaccacc atcggtctca ccgggcccgc ggcggttgc
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 caatacatcg tcgatacctt cctggtagtgt gtgttcgggg gggcccaaa cctgttcggc
 120
 cccatgcct cggcgttcgt gattgccag acccaatcgc tgcggagtt ttctctcagt
 180
 ggctcgatgg ccaagggtgct gacctgtgct tcggtgatcc tgatcctgat gctgcgccgc
 240

caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg ttttaagca
298

<210> 1936

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1936

Thr	Gly	Val	Ala	Gly	Ala	Ala	Phe	Thr	Thr	Ile	Gly	Ser	Thr	Gly	Pro
1				5					10					15	
Thr	Ala	Gly	Ser	Gln	Tyr	Ile	Val	Asp	Thr	Phe	Leu	Val	Val	Val	Phe
			20					25					30		
Gly	Gly	Ala	Gln	Ser	Leu	Phe	Gly	Pro	Ile	Ala	Ser	Ala	Phe	Val	Ile
			35				40					45			
Ala	Aln	Thr	Gln	Ser	Leu	Ser	Glu	Phe	Phe	Leu	Ser	Gly	Ser	Met	Ala
			50				55				60				
Lys	Val	Leu	Thr	Leu	Ser	Ser	Val	Ile	Leu	Ile	Leu	Met	Leu	Arg	Pro
65					70					75					80
Gln	Gly	Leu	Phe	Ser	Ile	Lys	Val	Arg	Lys						
				85					90						

<210> 1937

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1937

gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa
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gccttttaatt ctcccaattt atttcaaacc catcaaagaa ctccactcgg aaagaggtcc
120
tataaatgta gggaaatagt gagagccttc acagttttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaaact gtggaaaacc tatcgattat
240
cccgatttat ttcaaattca tgttagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtgga aagccttcac ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgtgggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtcccac gtcccttcac gcg
513

<210> 1938

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1938

Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

1	5	10	15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln			
20	25	30	
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg			
35	40	45	
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr			
50	55	60	
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr			
65	70	75	80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro			
85	90	95	
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val			
100	105	110	
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys			
115	120	125	
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His			
130	135	140	
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp			
145	150	155	160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala			
165	170		

<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
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aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta ggttatatct taagtgtggt gctgctaaca ttgccaggc
300
agcatctggt tcagctttat ctatattttt tgactgtctc gctcctctat gctggacatc
360
aaatttccag ggactatgtt cggagtgaac tggggtttgc ctatgagggg ccaatgtatt
420
tagaacctct ctctatgaat cgggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgetc ctgtgtcatg aaaacaaagg agatttgget gttttcagct cacatgcttc
540
ctctgctage acgactctgc cttgttctct tggagacaaat tgctatcacc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaatctt ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaaatcaac tggtagtccc tgttcttttc atggttttct
780

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ggctogtctt atttgcctt cagatttact cctatttcag tactogagat cagcctgcac
 840
 cacgtgagag gcttcttttc cttttcttga caaggttaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 tatcgcttcac gttacacaac ttctgtatttt gtttaagatag gattttcatt cactggatac
 1020
 ctagggttttg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat
 1080
 ggaccagagt gttagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtatatttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaatgta ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
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Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20				25						30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
		35					40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
		50				55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65						70				75				80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85						90				95		
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
			100				105						110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
			115				120					125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
			130			135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155				160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
					165					170				175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
			180						185				190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
			195				200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Ser	Leu	Trp	Asn
						215					220				
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235				240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

245 250 255

Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
260 265

<210> 1941
<211> 411
<212> DNA
<213> Homo sapiens

<400> 1941
ctggggccct gccccacagc atcatgatgg ggaactccc cctgggggtc gtctcccctt
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atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
120
gcacagccta cggtcgggag gatttcaacg ccctgtgtgg cagtcacgta ggcaccggct
180
acaaatcaaa tttccagccc gtggtctcat gccagccag tctggaggcc ttagacaacc
240
cgccaggggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
300
ccctggagggt gcctgacggc aagcatcccc tgcctgggag catgcgccag accagctcag
360
gctatgggcy ggagaagccc agtgcgggtc ccccaccaa ggaggtccgg a
411

<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1942
Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
1 5 10 15
Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
20 25 30
Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
35 40 45
Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
50 55 60
Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
65 70 75 80
Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
85 90 95
Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
100 105 110
Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Thr Lys Glu Val
115 120 125

Arg

<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1943
 nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg ttttaacagga
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 120
 acacagatgt acatggcata gcactgccca aaagtatcag cccaaggaaac cctactttcc
 180
 ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc
 240
 caggggtatgt tgggcttcgg tgtgttcaca cacttggtca tgtaaatctg aacacagact
 300
 ctctctgctt tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
 360
 ctctgcaatc tcacctgcta gagacg
 386

<210> 1944
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1944
 Met Gly Val Trp Gly Val Leu Ala Lys Ala Glu Arg Val Cys Val Gln
 1 5 10 15
 Ile Tyr Met Thr Lys Cys Val Asn Thr Pro Lys Pro Lys Ile Pro Trp
 20 25 30
 Arg Tyr Phe Gly Thr Arg Leu Arg Pro Lys Ile Ser Ile Ser Glu Leu
 35 40 45
 Asp Val Ala Gly Glu Ser Arg Val Pro Trp Ala Asp Thr Phe Gly Gln
 50 55 60
 Cys Tyr Ala Met Tyr Ile Cys Val Ala Val His Arg His Asp Ser Ile
 65 70 75 80
 Ser Leu Lys Ala Pro Arg Gly Ala Ala Ala Lys Thr Pro Val Lys His
 85 90 95
 Pro Ala Ala Ser Cys Phe Pro Pro Cys Trp Ser Pro Glu Cys Phe
 100 105 110

<210> 1945
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 1945
 nacgcgtcac gaagcgcgct cggcccacgt ggctccaagg gcgtccacgc gccctctctc
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 120
 ctccgcgtcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
 180
 cgactggaaa ttggcgacnn togtagacgc caaaagcttg aatctgcgcg cgtcaaaaacc
 240
 gaatcgctga tcattggacga tatacatttg gagttgcttg aactgcttga gctctactgt
 300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgaatgatcg
 360
 atccgcgagc cgaatgatcg cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1946

Xaa	Ala	Ser	Arg	Ser	Ala	Leu	Gly	Pro	Arg	Gly	Ser	Lys	Gly	Val	His
1			5						10					15	
Ala	Pro	Leu	Leu	Asp	Arg	Leu	Val	Ser	Asn	Met	Ala	Arg	Trp	His	Ala
			20						25					30	
Thr	Arg	Thr	Lys	Ile	Gln	Leu	Lys	Leu	Ala	Ile	Gln	Arg	Xaa	Gly	Met
			35				40					45			
Leu	Gln	Glu	Lys	Lys	Ala	Ala	Leu	His	Lys	Lys	Val	Arg	Leu	Glu	Ile
			50				55				60				
Ala	Asp	Xaa	Arg	Arg	Arg	Gln	Lys	Leu	Glu	Ser	Ala	Arg	Val	Lys	Thr
					70					75				80	
Glu	Ser	Leu	Ile	Met	Asp	Asp	Ile	His	Leu	Glu	Leu	Leu	Glu	Leu	Leu
				85					90					95	
Glu	Leu	Tyr	Cys	Glu	Thr	Leu	Tyr	Ala	Arg	Phe	Gly	Leu	Leu	Glu	Gly
			100					105						110	
Arg	Asp	Asn	Glu	Pro	Asp	Asp	Ala	Ile	Arg	Glu	Pro	Met	Ile	Ala	Ile
			115				120					125			
Ile	His	Ala	Ala	His	Arg	Thr	Glu	Val	Lys	Glu	Leu	His	Val	Leu	Gln
			130				135					140			
Asn	Met	Leu													
145															

<210> 1947

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1947

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 120
 gcgccccctg gggcacggat gtgcgcaggg ccgagctgca gctctgggcc atgagctct
 180
 gcagcagggt caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagccccctg gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctctcgcagg gacacgtggt ggttggccga ggccccctcc aaggtgaccc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag
 420

cccaggggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccc ag
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5				10					15		
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
		20						25					30		
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
		35					40					45			
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55				60					
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65				70					75					80	
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
				85					90				95		
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100				105					110			
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115				120					125				
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
	130					135					140				
Val	Thr	Ala	Tyr	Thr	Ala										
145					150										

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcgttgag ggaggcgaca tgcttcacga gcgcttgccg ccaactgctca agcgacatct
60
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacggggacg ctcacaagct tccattggcc attcgggggt cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgccca ccgatcgggc aatggcattc
240
cacagtaacg cgaagcgccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtea
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgaactccaag
360
atccgcgcct cgtccagct tgacggcgcc ggggt
395

<210> 1950

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1950

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Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
 20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
 35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
 50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
 65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
 85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
100           105           110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
115           120           125

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<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cgggcccgcc cttctcgcgc cggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggtcgggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccagcgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcgga gccacctcgt attcgctgga
240
gattcagtgg tggtagctca aggagccacc cggggagctg ctgcacgagc tggcgctcag
300
cgtgccgggg gccccggagca aggtaacaaa taaggatgca actaaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

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Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
 20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
 35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```


acgcgtggct cgacgaaaaa caagtacgag acatgcccga caaggtacta tcacacatgg
 60
 tggaataactg ctggggggcgc ttcacagaca acatcaataa cgctgtagct gcccaatatt
 120
 ggaaagggcc acacaagccc gatagtgcac atcaacggat cattgtaggc tattttcaaaa
 180
 ccgccaaaaca agccatgaac gcagcaaaaac aattccactg gaacaccocgg ctacaacaac
 240
 aatggaaaaac atggatactc ccagtcacaca acggcacccgt gtcgagttt ttcaccaaac
 300
 aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
 360
 acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
 415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
		20						25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65				70					75					80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
		85						90						95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
		100						105				110			
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
	115						120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac
 60
 caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttactatttg
 120
 gggagagggc ccgcccgggc cgcagtgggc gagggggccct tggcgcgctc ctgggaggtc
 180
 agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtgcaggg cgcatttcgc
 240
 ggtgactgcc agcatgaacc gcagccgacc gagttctcgc atcgggcttc tccgcagagt
 300

ggggaccctg gggaaggcgc caacttctct cctctgcccc cctcactccc cgcgggcgctc
 360
 cctggggcgc ctgccccggc cgcactgggc ggctctccatc gtcccttccc tctacctgca
 420
 ctgccccagg cgggagagag gacctggccc nncaggggac cagctgcagc gggcagcggg
 480
 gtccctgctcc cccaaccccc gccccatggc acggggctga accggt
 526

<210> 1958

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1				5					10					15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
	50				55					60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65				70						75				80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
			85					90					95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
			100				105						110		
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
	115					120						125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
	130				135						140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145			150					155						160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
			165					170					175		

<210> 1959

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1959

gtgcaccgga cggtcctccc aacggatcat gcgacggccc agcgggaaggc tcaccccgagt
 60
 cgtcagaagg atcaggcgcc ttgtcgtcgt cagacttcag gacatccccc gacatcggta
 120
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcgatgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg
 240
 aggtcctctt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgcttc
 300

cgctctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga
 360
 agtcgacgcg caacgcgt
 378

<210> 1960
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
 1 5 10 15
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
 20 25 30
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
 35 40 45
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly
 50 55 60
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
 65 70 75 80
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro
 85 90 95
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala
 100 105 110

<210> 1961
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1961
 ggatccacc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg
 60
 tccaacctgg tcaatctgtt tgagaatagc aggacccagc aagcagcacc cagaggccag
 120
 aggcttagagg acgtgcatca ccgccctgag tgcaggccctc ccgagtcctcc aggaccacgg
 180
 gagaagacga atgtcgggga gccctgtggg tctgagccca ggacagtcag caggaggtag
 240
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
 300
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctgtgag
 360
 acagagcagg cctatgtggc gcgc
 384

<210> 1962
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

```

      1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115          120          125

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<210> 1963

<211> 323

<212> DNA

<213> Homo sapiens

<400> 1963

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nnncccttcc taccctccca tactcccccac cctcttctct cccctgtgtc tgagcttgca
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ggcatgaaac acccacctgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcacccctgg
180
cgaccactca ggcctgcac tcgctggggccc ccttcagacc tctcggggtc atcttccctc
240
tccctggcca ttatttttct tcattctgggc tggggcccgga ggggcgttcc ccccttctct
300
cttcttttct tttttttctc ttt
323

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<210> 1964

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1964

```

Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

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100

<210> 1965
<211> 1416
<212> DNA
<213> Homo sapiens

105

<400> 1965
cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttgtg
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agcacccttg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaagctgagct
120
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
180
cgggccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag
240
cggcagaacc gggccctgcg ggcctgagctg gaggcactgc tgagcagcaa ggatgacgtc
300
ggcaagagcg tgcattgagct ggaacgagcc tgcgggtag cagaacaggc agccaatgat
360
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
420
cgtctggagg tgactgtgca ggcctcctcaag actcagcatg agcgtgacct gcagggccgt
480
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagagggtg
540
gagcgggatg aggagcggaa gcagcgcaact ctggccgtgg ctgccgcaa gaagctggag
600
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
660
gtgaagcagc ttgcgaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag
720
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaaaa gcgcctcaag
780
ggcctggagg ctgaggtgct gcggctgcag gaggaaactgg ccgcctcgga cagtgtctgg
840
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc
900
aaggcagcca ttctggagga gaagcgctcag ctggaggggc gcctggggca gttggaggaa
960
gagctggagg aggagcagac anactcagag ctgctcaatg accgtaccg caagctgtct
1020
ctgagggtag agtcaactgac cacagagctg tcagctgagc gcagtttctc agccaaggca
1080
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag
1140
gaggatgctg gggcccgctg ccgccacaag atgaccattg ctgcccttga gtctaaagttg
1200
gcccaggctg aggagcagct agagcaagag accagagagc gcatcctctc tggaaagctg
1260
gtgccccaaa gtaagaagcg gtttaaagag gtggtgtctc aggtggagga ggagcggagg
1320
gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag
1380

cggcagctgg aggaggccga ggaggagcca tcccgg
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
1				5					10				15		
Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
			20					25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55				60					
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu
65					70				75						80
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
			85						90				95		
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
			100					105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
		115				120					125				
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130					135					140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150				155						160
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
			165						170				175		
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
		180						185					190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
		195				200					205				
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210				215						220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225					230					235					240
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245						250				255		
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260				265						270			
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
	275					280					285				
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290					295				300					
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310				315						320
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
		325						330					335		
Arg	Lys	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala	
		340				345						350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

```

          355          360          365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
   370          375          380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385          390          395          400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
          405          410          415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
          420          425          430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
          435          440          445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
          450          455          460
Glu Ala Glu Glu Glu Ala Ser Arg
465          470

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<210> 1967

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1967

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aaatttgaat cctggaaaagc tgatctcgat aagtcgtttg tcgagctggt tcggcggttg
60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcgcc gccaaaggga
120
tgcatacacat ctgcgcggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc
180
ttgcaccagca tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggg
240
tagtgagactg taccggatct catttggtct accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcacc tctagatatg
360
caaacggccg ggggttttcat gcgctcgaga agctgatgct g
401

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<210> 1968

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1968

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Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
   1           5           10           15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
          20           25           30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
          35           40           45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
          50           55           60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65           70           75           80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969

<211> 464

<212> DNA

<213> Homo sapiens

<400> 1969

nncatcgacg cgactgggac tcactctgggt gacggccac agatggacac tctgcgcgag
 60
 gaggtcgccg ttcaccgcgt caccgatgct gtcaccctgc tcggtcacgt cgccaacacc
 120
 cagggtcatgg cgaccagcgt tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg
 180
 gaaggacttc ctgtatcaat gatggaggtt gcttccctcg gtatcccat tategcgact
 240
 gggtcgccg gagtaggaga aatcgtctcg tctgacaacg ggcactctatt ccctgcccag
 300
 ttaccggaca cccaggcatt tgacgcgtta gtgcagctgg cagctctgtc tgaggacgag
 360
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagtccg cgcctctgtc
 420
 gtctaccccg aattctgtcg cagtgctgg ggacgagctg atca
 464

<210> 1970

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1970

Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp
 1 5 10 15
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr
 20 25 30
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp
 35 40 45
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro
 50 55 60
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr
 65 70 75 80
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu
 85 90 95
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln
 100 105 110
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser
 115 120 125
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Tyr Pro Glu
 130 135 140
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp
 145 150

<210> 1971

<211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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 420
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<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

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 Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Ser Lys
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 Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
 35 40 45
 Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
 50 55 60
 Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
 65 70 75 80
 Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
 85 90 95
 Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
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 Glu Lys Gln Thr Lys Gln
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<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

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 Gln Lys Lys Ser Asp Gly Leu Gly Ser Phe Val Ala Thr Thr Leu
 20 25 30
 Glu Glu Leu Gln Ala Met Asn Ser Asp Thr Arg Phe Thr Thr Ser Val
 35 40 45
 Gly Ile Asp Leu Ser Pro Ala Arg Ser Phe Ser Ala Trp Ala Leu Arg
 50 55 60
 Gly Thr Thr Phe Ser Ala Pro Ser Met Thr Lys Ala Ser Arg Ser Ser
 65 70 75 80
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 85 90 95
 Pro Pro Val Lys Ser Cys Ala
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<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 agaaggcggg tgccgacacg gcgagccgct agcaggagat ttgcgatgag ctggcgacga
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 ctgcgcgcga catctcttgc caaacacagg cccacgccaa caacacgac gccgagattt
 240
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 370

<210> 1976

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1976

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Gly	Gln	Leu	Leu	Ala	Gln	Leu	Gly	Asn	His	Phe	Gly	Ser	Ser	Leu	Trp
			20					25					30		
Arg	Leu	Arg	Gly	Gly	Leu	His	Gln	Ser	Arg	Asn	Leu	Gly	Asp	Arg	Val
			35				40					45			
Val	Gly	Val	Gly	Leu	Cys	Leu	Arg	Arg	Asp	Val	Ala	Arg	Ser	Leu	Arg
			50				55				60				
Gln	Arg	Ile	Ala	Asn	Leu	Leu	Leu	Thr	Ala	Arg	Arg	Val	Gly	Thr	Arg
65				70						75					80
Leu	Leu	Pro	Arg	Leu	Ala	Gln	Leu	Gly	Ala	His	Cys	Thr	Gln	Arg	Ile
				85					90					95	
Gly	Pro	Ser	Arg	Gln	Thr	Leu	Leu	Val	Ala	Gly	Leu	Gln	Arg	Gly	Leu
			100					105					110		
Gln	Leu	His	Glu	Arg	Leu	Ala	Arg	Arg							
			115				120								

<210> 1977

<211> 551

<212> DNA

<213> Homo sapiens

<400> 1977

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120					
gagagaggaga	cagggcagcca	ggctgttaca	cagggaggag	cacaggagggt	gcacggggag
180					
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240					
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300					
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360					
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420					
gttaaaatgg	ctgatccaa	agctggaggg	ggggtgaggt	gactgggtgc	tgctcttccc
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551					

<210> 1978

 $\langle 211 \rangle$ 101

<212> PRT

<213> Homo sapiens

<400> 1978

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Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
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 20          25          30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
 35          40          45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50          55          60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
 65          70          75          80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
 85          90          95
Gln Pro Thr Ser Ser
100

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<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

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120
actatgctgc tcgggtgggc gtccctgctg ctgtgcgcgt tccgcctgcc cctggcgcgc
180
gtcggccccg ccgcgacacc tgcgcaggat aaagccgggc agcctccgac tgctgcagca
240
gccgccccagc cccgccggcg gcagggggag gaggtgcagg agcgagccga gcctccccgc
300
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480
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780
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840
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960

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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Gln Pro Pro	Thr Ala Ala Ala Ala	Gln Pro Arg Arg Arg Gln Gly	
	35	40	45
Glu Glu Val	Gln Glu Arg Ala Glu Pro	Pro Gly His Pro His Pro Leu	
	50	55	60
Ala Gln Arg	Arg Arg Ser Lys Gly Leu Val	Gln Asn Ile Asp Gln Leu	
	65	70	75
Tyr Ser Gly	Gly Gly Lys Val Gly Tyr Leu Val	Tyr Ala Gly Gly Arg	
	85	90	95
Arg Phe Leu	Leu Asp Leu Glu Arg Asp Gly	Ser Val Gly Ile Ala Gly	
	100	105	110
Phe Val Pro	Ala Gly Gly Thr Ser Ala Pro	Trp Arg His Arg Ser	
	115	120	125
His Cys Phe	Tyr Arg Gly Thr Val Asp Ala Ser	Pro Arg Ser Leu Ala	
	130	135	140
Val Phe Asp	Leu Cys Gly Gly Leu Asp Gly	Phe Phe Ala Val Lys His	
	145	150	155
Ala Arg Tyr	Thr Leu Lys Pro Leu Leu Arg	Gly Pro Trp Ala Glu Glu	
	165	170	175
Glu Lys Gly	Arg Val Tyr Gly Asp Gly Ser	Ala Arg Ile Leu His Val	
	180	185	190
Tyr Thr Arg	Arg Ala Ser Ala Ser Arg Pro	Cys Arg Arg Ala Pro Ala	
	195	200	205
Ala Lys Pro	Pro Arg Pro His Arg Arg Pro	Thr Ser Met Leu Arg Arg	
	210	215	220
Thr Ala Thr	Arg Ala Asp Ala Gln His Ala	Ser Gln Leu Leu Asp Gln	
	225	230	235
Ser Ala Leu	Ser Pro Ala Gly Gly Ser Gly	Pro Gln Thr Trp Trp Arg	
	245	250	255
Arg Arg Arg	Arg Ser Ile Ser Arg Ala Arg	Gln Val Glu Leu Leu Leu	
	260	265	270
Val Ala Asp	Ala Ser Met Ala Arg Leu Tyr	Gly Arg Gly Leu Gln His	
	275	280	285
Tyr Leu Leu	Thr Leu Ala Ser Ile Ala Asn	Arg Leu Tyr Ser His Ala	
	290	295	300
Ser Ile Glu	Asn His Ile Arg Leu Ala Val	Val Lys Val Val Val Leu	
	305	310	315
Gly Asp Lys	Asp Lys Ser Leu Glu Val Ser	Lys Asn Ala Ala Thr Thr	
	325	330	335
Leu Lys Asn	Phe Cys Lys Trp Gln His Gln	His Asn Gln Leu Gly Asp	
	340	345	350
Asp His Glu	Glu His Tyr Asp Ala Ala Ile	Leu Phe Thr Arg Glu Asp	
	355	360	365
Leu Cys Gly	His His Ser Cys Asp Thr Leu	Gly Met Ala Asp Val Gly	
	370	375	380
Thr Ile Cys	Ser Pro Glu Arg Ser Cys Ala	Val Ile Glu Asp Asp Gly	
	385	390	395
Leu His Ala	Ala Phe Thr Val Ala His Glu	Ile Gly His Leu Leu Gly	
	405	410	415
Leu Ser His	Asp Ser Lys Phe Cys Glu Glu	Thr Phe Gly Ser Thr	
	420	425	430
Glu Asp Lys	Arg Leu Met Ser Ser Ile Leu	Thr Ser Ile Asp Ala Ser	

435 440 445
 Lys Pro Trp Ser Lys Cys Thr Ser Ala Thr Ile Thr Glu Phe Leu Asp
 450 455 460
 Asp Gly His Gly Asn Cys Leu Leu Asp Leu Pro Arg Lys Gln Ile Leu
 465 470 475 480
 Gly Pro Glu Glu Leu Pro Gly Gln Thr Tyr Asp Ala Thr Gln Gln Cys
 485 490 495
 Asn Leu Thr Phe Gly Pro Glu Tyr Ser Val Cys Pro Gly Met Asp Val
 500 505 510
 Cys Ala Arg Leu Trp Cys Ala Val Val Arg Gln Gly Gln Met Val Cys
 515 520 525
 Leu Thr Lys Lys Leu Pro Ala Val Glu Gly Thr Pro Cys Gly Lys Gly
 530 535 540
 Arg Ile Cys Leu Gln Gly Lys Cys Val Asp Lys Thr Lys Lys Tyr
 545 550 555 560
 Tyr Ser Thr Ser Ser His Gly Asn Trp Gly Ser Trp Gly Ser Trp Gly
 565 570 575
 Gln Cys Ser Arg Ser Cys Gly Gly Gly Val Gln Phe Ala Tyr Arg His
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 Cys Asn Asn Pro Ala Pro Arg Asn Asn Gly Arg Tyr Cys Thr Gly Lys
 595 600 605
 Arg Ala Ile Tyr His Ser Cys Ser Leu Met Pro Cys Pro Pro Asn Gly
 610 615 620
 Lys Ser Phe Arg His Glu Gln Cys Glu Ala Lys Asn Gly Tyr Gln Ser
 625 630 635 640
 Asp Ala Lys Gly Val Lys Thr Phe Val Glu Trp Val Pro Lys Tyr Ala
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 Gly Val Leu Pro Ala Asp Val Cys Lys Leu Thr Cys Arg Ala Lys Gly
 660 665 670
 Thr Gly Tyr Tyr Val Val Phe Ser Pro Lys Val Thr Asp Gly Thr Glu
 675 680 685
 Cys Arg Pro Tyr Ser Asn Ser Val Cys Val Arg Gly Lys Cys Val Arg
 690 695 700
 Thr Gly Cys Asp Gly Ile Ile Gly Ser Lys Leu Gln Tyr Asp Lys Cys
 705 710 715 720
 Gly Val Cys Gly Gly Asp Asn Ser Ser Cys Thr Lys Ile Val Gly Thr
 725 730 735
 Phe Asn Lys Lys Ser Lys Gly Tyr Thr Asp Val Val Arg Ile Pro Glu
 740 745 750
 Gly Ala Thr His Ile Lys Val Arg Gln Phe Lys Ala Lys Asp Gln Thr
 755 760 765
 Arg Phe Thr Ala Tyr Leu Ala Leu Lys Lys Lys Asn Gly Glu Tyr Leu
 770 775 780
 Ile Asn Gly Lys Tyr Met Ile Ser Thr Ser Glu Thr Ile Ile Asp Ile
 785 790 795 800
 Asn Gly Thr Val Met Asn Tyr Ser Gly Trp Ser His Arg Asp Asp Phe
 805 810 815
 Leu His Gly Met Gly Tyr Ser Ala Thr Lys Glu Ile Leu Ile Val Gln
 820 825 830
 Ile Leu Ala Thr Asp Pro Thr Lys Pro Leu Asp Val Arg Tyr Ser Phe
 835 840 845
 Phe Val Pro Lys Lys Ser Thr Pro Lys Val Asn Ser Val Thr Ser His
 850 855 860
 Gly Ser Asn Lys Val Gly Ser His Thr Ser Gln Pro Gln Trp Val Thr

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      865              870              875              880
      Gly Pro Trp Leu Ala Cys Ser Arg Thr Cys Asp Thr Gly Trp His Thr
      885              890              895
      Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys
      900              905              910
      Pro Leu Ser Gln Arg Pro Ser Ala Phe Lys Gln Cys Leu Leu Lys Lys
      915              920              925
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<210> 1981

<211> 327

<212> DNA

<213> Homo sapiens

<400> 1981

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180
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240
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327

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<210> 1982

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1982

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  20              25              30
Gly Val Asn Pro Arg Gly Val Asp Asn Arg Thr Ser Met Ala Val Phe
  35              40              45
Ser Pro Pro Lys Ala Ala Gly Gly Arg Cys Pro Gly Pro Cys Arg
  50              55              60
Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Ser Gly Arg Gly Arg
  65              70              75              80
Gly Pro Ala Leu Ser Glu Trp Ala Ser Cys Leu Asn Gly Ser Lys Val
  85              90              95
Arg Ala Gly Ser Pro Gly Ser Glu Ala Asp Ala
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<210> 1983

<211> 383

<212> DNA

<213> Homo sapiens

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<211> 2971

<212> PRT

<213> Homo sapiens

<400> 1990

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<211> 3102

<212> DNA

<213> Homo sapiens

<400> 1991

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Ala	Leu	Lys	Gly	Ser	Lys	Lys	Leu	Val	Leu	Ser	Val	Tyr	Ser	Ala	Gly
			35				40					45			
Arg	Ile	Pro	Gly	Gly	Tyr	Val	Thr	Asn	His	Ile	Tyr	Thr	Trp	Val	Asp
			50				55				60				
Pro	Gln	Gly	Arg	Ser	Ile	Ser	Pro	Pro	Ser	Gly	Leu	Pro	Gln	Pro	His
					70					75				80	
Gly	Gly	Ala	Leu	Arg	Gln	Gln	Glu	Gly	Asp	Arg	Arg	Ser	Thr	Leu	His
					85				90					95	
Leu	Leu	Gln	Gly	Gly	Asp	Glu	Lys	Lys	Val	Asn	Leu	Val	Leu	Gly	Asp
			100					105					110		
Gly	Arg	Ser	Leu	Gly	Leu	Thr	Ile	Arg	Gly	Gly	Ala	Glu	Tyr	Gly	Leu
			115				120				125				
Gly	Ile	Tyr	Ile	Thr	Gly	Val	Asp	Pro	Gly	Ser	Glu	Ala	Glu	Gly	Ser
			130				135				140				
Gly	Leu	Lys	Val	Gly	Asp	Gln	Ile	Leu	Glu	Val	Asn	Gly	Arg	Ser	Phe
					150				155					160	
Leu	Asn	Ile	Leu	His	Asp	Glu	Ala	Val	Arg	Leu	Leu	Lys	Ser	Ser	Arg
					165				170					175	
His	Leu	Ile	Leu	Thr	Val	Lys	Asp	Val	Gly	Arg	Leu	Pro	His	Ala	Arg
			180					185					190		
Thr	Thr	Val	Asp	Glu	Thr	Lys	Trp	Ile	Ala	Ser	Ser	Arg	Ile	Arg	Glu
			195				200					205			
Thr	Met	Ala	Asn	Ser	Ala	Gly	Phe	Leu	Gly	Asp	Leu	Thr	Thr	Glu	Gly
			210			215				220					
Ile	Asn	Lys	Pro	Gly	Phe	Tyr	Lys	Gly	Pro	Ala	Gly	Ser	Gln	Val	Thr
					230				235					240	
Leu	Ser	Ser	Leu	Gly	Asn	Gln	Thr	Arg	Val	Leu	Leu	Glu	Glu	Gln	Ala
					245				250					255	
Arg	His	Leu	Leu	Asn	Glu	Gln	Glu	His	Thr	Thr	Met	Ala	Tyr	Tyr	Leu

260										265										270													
Asp	Glu	Tyr	Arg	Gly	Gly	Ser	Val	Ser	Val	Glu	Ala	Leu	Val	Met	Ala																		
																275																	
Leu	Phe	Lys	Leu	Leu	Asn	Thr	His	Ala	Lys	Phe	Ser	Leu	Leu	Ser	Glu																		
																290																	
Val	Arg	Gly	Thr	Ile	Ser	Pro	Gln	Asp	Leu	Glu	Arg	Phe	Asp	His	Leu																		
																305																	
Val	Leu	Arg	Arg	Glu	Ile	Glu	Ser	Met	Lys	Ala	Arg	Gln	Pro	Pro	Gly																		
																320																	
Pro	Gly	Ala	Gly	Asp	Thr	Tyr	Ser	Met	Val	Ser	Tyr	Ser	Asp	Thr	Gly																		
																335																	
Ser	Ser	Thr	Gly	Ser	His	Gly	Thr	Ser	Thr	Thr	Val	Ser	Ser	Ala	Arg																		
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Asn	Thr	Leu	Asp	Leu	Glu	Glu	Thr	Gly	Glu	Ala	Val	Gln	Gly	Asn	Ile																		
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Asn	Ala	Leu	Pro	Asp	Val	Ser	Val	Asp	Asp	Val	Arg	Ser	Thr	Ser	Gln																		
																385																	
Gly	Leu	Ser	Ser	Phe	Lys	Pro	Leu	Pro	Arg	Pro	Pro	Pro	Leu	Ala	Gln																		
																400																	
Gly	Asn	Asp	Leu	Pro	Leu	Gly	Gln	Pro	Arg	Lys	Leu	Gly	Arg	Glu	Asp																		
																415																	
Leu	Gln	Pro	Pro	Ser	Ser	Met	Pro	Ser	Cys	Ser	Gly	Thr	Val	Phe	Ser																		
																430																	
Ala	Pro	Gln	Asn	Arg	Ser	Pro	Pro	Ala	Gly	Thr	Ala	Pro	Thr	Pro	Gly																		
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Thr	Ser	Ser	Ala	Gln	Asp	Leu	Pro	Ser	Ser	Pro	Ile	Tyr	Ala	Ser	Val																		
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Thr	Ser	Ser	Ala	Gln	Asp	Leu	Pro	Ser	Ser	Pro	Ile	Tyr	Ala	Ser	Val																		
																475																	
Ser	Pro	Ala	Asn	Pro	Ser	Ser	Lys	Arg	Pro	Leu	Asp	Ala	His	Leu	Ala																		
																480																	
Leu	Val	Asn	Gln	His	Pro	Ile	Gly	Pro	Phe	Pro	Arg	Val	Gln	Ser	Pro																		
																495																	
Pro	His	Leu	Lys	Ser	Pro	Ser	Ala	Glu	Ala	Thr	Val	Ala	Gly	Gly	Cys																		
																510																	
Leu	Leu	Pro	Pro	Ser	Pro	Ser	Gly	His	Pro	Asp	Gln	Thr	Gly	Thr	Asn																		
																525																	
Gln	His	Phe	Val	Met	Val	Glu	Val	His	Arg	Pro	Asp	Ser	Glu	Pro	Asp																		
																540																	
Val	Asn	Glu	Val	Arg	Ala	Leu	Pro	Gln	Thr	Arg	Thr	Ala	Ser	Thr	Leu																		
																555																	
Ser	Gln	Leu	Ser	Asp	Ser	Gly	Gln	Thr	Leu	Ser	Glu	Asp	Ser	Gly	Val																		
																570																	
Asp	Ala	Gly	Glu	Ala	Glu	Ala	Ser	Ala	Pro	Gly	Arg	Gly	Arg	Gln	Ser																		
																585																	
Val	Ser	Thr	Lys	Ser	Arg	Ser	Ser	Lys	Glu	Leu	Pro	Arg	Asn	Glu	Arg																		
																600																	
Pro	Thr	Asp	Gly	Ala	Asn	Lys	Pro	Pro	Gly	Leu	Leu	Glu	Pro	Thr	Ser																		
																615																	
Thr	Leu	Val	Arg	Val	Lys	Lys	Ser	Ala	Ala	Thr	Leu	Gly	Ile	Ala	Ile																		
																630																	
Glu	Gly	Gly	Ala	Asn	Thr	Arg	Gln	Pro	Leu	Pro	Arg	Ile	Val	Thr	Ile																		
																645																	
Gln	Arg	Gly	Ser	Ala	His	Asn	Cys	Gly	Gln	Leu	Lys	Val	Gly	His																			
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Val	Ile	Leu	Glu	Val	Asn	Gly	Leu	Thr	Leu	Arg	Gly	Lys	Glu	His	Arg																		
																675																	

690					695					700					
Glu	Ala	Ala	Arg	Ile	Ile	Ala	Glu	Ala	Phe	Lys	Thr	Lys	Asp	Arg	Asp
705					710					715					720
Tyr	Ile	Asp	Phe	Leu	Val	Thr	Glu	Phe	Asn	Val	Met	Leu			
				725					730						

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<210> 1993
<211> 957
<212> DNA
<213> Homo sapiens
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400> 1993

60	nnagaaaacct	acgggatgac	acgtgcccct	gatcacatcg	acatcgccat	ccagctggcg
120	cagtcggtcg	ccgtcatggg	gccgtccogg	tcaggcaaga	ccacctctcg	gcactgcttg
180	tcgggggatcc	tctcgctcta	ctccggcagt	atcgaaactg	ctctgcggga	cgccacgcgc
240	aacgtcgaaa	acctctctaa	cgaaggccga	gcaaagctac	gccgtcaatc	ctttggtttc
300	gtcttccaac	aaggaatgct	cgtacccgag	ctcactgctg	tcgagaacac	cgccctaccg
360	ctcatgctta	acggcgctac	ccaaaccgat	gcggtcaggt	atgccacca	atggcctgaa
420	tcgatggggg	tagggcgcat	ggaggatcgt	cggatttggt	agctctccgg	ggggccaagt
480	caacgcgtca	ctattgcccg	gtcccaggta	atcgatccgt	cgattgtctt	cgctgcagaa
540	cccaccggag	ccctcgactc	agccaccgcg	gtcgaaagtc	tggccattct	gctttcggcg
600	acgacggggc	ggggagcgac	cctcgtcgct	gtcaccctat	acgaggacgt	tgcccgcgcg
660	tgccagcgca	tccttcctat	gcacgacggt	cggatcgtct	ctgaccacgt	acgtcattcc
720	gattggggagt	ggtgatcatg	actataacgc	ccctatcga	accgggaacc	gccgatcaaa
780	ggatcccgct	cctccccgct	cgcgagcccc	tgggagctac	gcccggaagt	cttaccactg
840	ctcgcatcct	cagcatgacc	ctccgtgctc	cagccgctga	ccaactccac	tggcggttgc
900	cggtagttgc	tttcgctgtc	attgcaacca	tcactctcga	cgtcactggc	ggtgcgctca
957	tgatgtggca	tctaccggga	gacaactctg	gcttctacaa	gctgacctcg	acaattg

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<210> 1994
<211> 224
<212> PRT
<213> Homo sapiens
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<400> 1994
Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala
1 5 10 15
Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

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                20                25                30
Lys Thr Thr Leu Leu His Cys Leu Ser Gly Ile Leu Ser Pro Asp Ser
      35                40                45
Gly Ser Ile Glu Leu Ala Leu Pro Asp Arg Thr Val Asn Val Glu Asn
      50                55                60
Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
65                70                75                80
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
      85                90                95
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
      100                105                110
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
      115                120                125
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gly Gln Ala Gln Arg Val Thr
      130                135                140
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
145                150                155                160
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
      165                170                175
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Thr
      180                185                190
His Asp Glu Asp Val Ala Arg Arg Cys Gln Arg Ile Leu His Leu His
      195                200                205
Asp Gly Arg Ile Val Ser Asp His Val Arg His Ser Asp Gly Arg Trp
      210                215                220

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<210> 1995

<211> 285

<212> DNA

<213> Homo sapiens

<400> 1995

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catcaccacc attatcaaca ccatcatcac caccattatc acctttatca ccaccatcat
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caccatcacc accatcatca ctaccaccat cagccaccac atcatgtgat gactctcaat
120
actgtctcca tcatgtgtga ctgtgactgt ggaccagccc ctggggctct gctctgctga
180
cctatattct ttgtctcttg ttctgagaa gctgggagtt gagaccaggt aaggtgttgt
240
acagacactt gtgaccccaa attccatgag acagaggacc tcccn
285

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<210> 1996

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1996

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His His His His Tyr Gln His His His His His His Tyr His Leu Tyr
1                5                10                15
His His His His His His His His His His Tyr His His His Ala
20                25                30
His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

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35 40 45
 Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys
 50 55

<210> 1997
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 1997
 ccgctggtgg tgggtgctgct gattggcatg gccatctata ccttcgcaa gaaagacctg
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 ggcaagctgc acaagccggt cagcatcggc cggcgcgaga tgctggtggg gctggccatc
 120
 ggtggcggca tcggttttta cgacggcctg ttcggggcgg gtaccggcag tttcctgatg
 180
 ttccctgttcg tgcggttttt gcgttttgat ttcttgcatg cttctgccc ggccaaggtt
 240
 gtcaacctgg ccaccaatgt ggcggcactg tgctttttca ttcccagcgg caatgtgctg
 300
 tatggctacg cgt
 313

<210> 1998
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1998
 Pro Leu Val Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg
 1 5 10 15
 Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg
 20 25 30
 Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp
 35 40 45
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
 50 55 60
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Lys Val
 65 70 75 80
 Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser
 85 90 95
 Gly Asn Val Leu Tyr Gly Tyr Ala
 100

<210> 1999
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 1999
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 tccactgcgc agagggcgaga tgtgaagtac tccggtactg ttcattttac cggtgttggc
 120

ggaagaatgg atcttactct cgtgaccct gagattgtcg ttaacaatgg cgatgatcat
 180
 gtgattatgt ctgtgaagtc caagactatg gtcgggcagt tggttgacta tggccgtata
 240
 acctttcgttg atatgaccgg ctctattacg caggggtcaaa acgatgcagc tcaggttgtg
 300
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcac tcgctggcct ctatcaagct
 360
 ggaaagccca tggatgacat cgattcgtcc ttaaagcct
 399

<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
1				5				10					15		
Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20					25					30			
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40					45				
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50				55					60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65			70				75						80		
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
			85				90								

<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

nnagaatgaag gacgtcataa ttctgtgatc agcagtgcag ctgactggag gaggggacaaa
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 ttctggcagga cccactgca ctatgcagct gctaacggta gctaccagtg tgcagtaaca
 120
 ttggttgacty ctggggcagg tgtcaacgag gccgactgta aaggctctgc tcccctccac
 180
 tacgctgccg cttctgacac ttacaggtag agcgggaacc catacacctt ccagccatga
 240
 tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg
 300
 gagttcttac tggataacgg tgcagacccc tccttcgggg acaggcgagg ctacacagct
 360
 gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgtctct agaaatgtcc
 420
 tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc
 480
 tacaacggtc actgtgaagc cttagaagac ctggcggaga cgctgggtgaa tctggacgta
 540

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggttc tactgagtgt
 600
 gtggaggtgc ttacagccca cggcgctctt gcctcatca aggagcgcaa gcgcaagtgg
 660
 acacccttgc acgccgctgc tgcctctggc cactgactt gctgatcgac
 720
 agtgggggaa gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg
 780
 ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggattccaca
 840
 gctgatgctg ctgacctccg gggccgact gcctccacc gcggggcagt gactgggtgt
 900
 gaggactgcc tggctgccct gctggaccac gaagcatttg tgctgtgccg agactttaag
 960
 ggccgcacgc ccattcacct ggcctcagcc tgtggccaca ctgcagtagt gcggaccctg
 1020
 ctgcaggctg cctttccac agatccctg gatgcggggg tggattacag cggatactcg
 1080
 cccatgcaat gggcctccta cactggacat gaagattgtc tggagttgtt acttgaacac
 1140
 agcccgtttt cgtacctgga aggaacccc ttcactcctt tgcaactgtc agtgattaat
 1200
 aaccaagaca gcaccacaga gatgtactg ggagctctgg gtgccaagat tgtgaacagc
 1260
 cgagatgcca aaggacggac ccccttccac gccgctgcct tcgcgacaa tgtctctggg
 1320
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcca ctgaccacac tggccgcact
 1380
 gcgctcatga cggcggctga gaaaggcgag accgctgctg tggaaattct gctg
 1434

<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
1				5					10					15	
Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25						30	
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
			35				40				45				
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55				60					
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

ntcattgacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcagatgtg
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 attgcagata ccattaagga gttgcaagat tcggccactt acaacagtct cctgcaagct
 120
 ttgagcaaa agagggaaaa caaatgcat ttctatgaca tcattttccag ggagggaaaaa
 180
 ggaagaaaa agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa
 240
 tttgaagtcc agagtcagaa tgagtatat gctaacctca aggaccaact gcaagagatg
 300
 aaggcaaaa ccaacttggg gaatcgctac atgaaaacca ataccgagct gcagattggc
 360
 cagaccaga aaaagtgtaa cagaacagag gaactcttgg tggagagat tgagaaaaac
 420
 aggatgaaaa ccgaagaaga gggccggact catacagaga ttgaaatgtt ccttagaaag
 480
 gagcagcagg tgggtcccca cagcttttct atgctttgac ttttttttgg tactctgctt
 540
 ataactgagga aacaaaaaga atattttgaa ggaaaaccaa ccatcattct ttacgcctaa
 600
 tgaactttag ctcatgtttt ctttcagggt tatgcactcg aatagatatc ttatatagct
 660
 gtaatttgag agagtgcagg taaaattg
 688

<210> 2004

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2004

Xaa	Met	Thr	Thr	Glu	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1				5				10					15		
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20				25					30			
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Gly	Asn	Lys
		35				40						45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50				55				60						
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65				70				75						80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85				90					95			
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
			100			105						110			
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
	115					120					125				
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130				135					140					
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145				150				155						160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165				170								

<210> 2005
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2005
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 120
 tcggagtcag ggggtgcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga
 180
 agcccgccgt gtcacagggt ctccctgaccg gctgggtagg gtttggcctt atcttacagc
 240
 cagtgtctgtg tttgtctcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat
 300
 gtctactccc tgctttggtc tgcctgaaa acaattgcaa agacattgtg gctg
 354

<210> 2006
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2006
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu
 1 5 10 15
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu
 20 25 30
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe
 35 40 45
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly
 50 55 60
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg
 65 70 75 80
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu
 85 90 95
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala
 100 105 110

<210> 2007
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2007
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg
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 tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgctg
 120
 tgtgcgtatg tgtgcataann catgtgcaca catgtacaca cgtgtacatg ttcatgcatg
 180
 tgcacgtgca tatgtgtaca cgtgtatgctg tgtacatgta tgagcatatg tacacgtgtg
 240

gatgtgtgtg tatgcattgt tgtgtgcaca gatatgcctt ttcctttcat acaggctgg
 300
 ttgagtattg ctggtaggca gggacaactt tccgt
 335

<210> 2008
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2008
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val
 1 5 10 15
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa
 20 25 30
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met
 35 40 45
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile
 50 55 60
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val
 65 70 75 80
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe
 85 90 95
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser
 100 105 110

<210> 2009
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 2009
 gacatcaccc cgctgctggc caaccccaac gggtttctccg cagcgatcga ggaactgggtg
 60
 ctgcgttccc caccgacat cgacgtgggtc gtccgcatgg aggcctgcggg ctctctcttc
 120
 gcagctccgg tcgccttggc catcggggca ggattcgtgc cggtcgcgcaa gccgggggaag
 180
 ctccccggcc aggtgtattc cgagacottt gccatggagt acgggggagga gaccctcacc
 240
 gtccaccagt acgcatcaca gccgggggtcg cgcgtcatca tcgtcgac
 288

<210> 2010
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2010
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile
 1 5 10 15
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly
 20 25 30
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

35					40					45					
Gly	Ala	Gly	Phe	Val	Pro	Val	Arg	Lys	Pro	Gly	Lys	Leu	Pro	Gly	Gln
50					55					60					
Val	Tyr	Ser	Glu	Thr	Phe	Ala	Met	Glu	Tyr	Gly	Glu	Glu	Thr	Leu	Thr
65					70					75					80
Val	His	Gln	Tyr	Ala	Ile	Lys	Pro	Gly	Ser	Arg	Val	Ile	Ile	Val	Asp
				85					90					95	

<210> 2011

<211> 384

<212> DNA

<213> Homo sapiens

<400> 2011

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120 gaagtcaacg gtggacgacg ggttggaggg ttgttgatt ggcgagtggg gaagcgagca
180 gattgtaaat tggtagaacg gggaaacagag attagtcaca atgacgagaa cgacaacaga
240 atgttgattg ttatagccat ctctggagga gagggaaaaa gccaggtatc tagacacgca
300 aagcaaatgt gagccgaggg gacagtgcgc tccttcgctc ctccgcaact cccacgaggc
360 accttcatt ctgtgggcag aatt
384

<210> 2012

 $\langle 211 \rangle$ 123

<212> PRT

<213> Homo sapiens

<400> 2012

Met	Glu	Gly	Ala	Ser	Trp	Glu	Leu	Pro	Arg	Asn	Glu	Gly	Arg	His	Cys
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Pro	Leu	Gly	Ser	His	Leu	Leu	Ser	Leu	Ser	Arg	Tyr	Leu	Ala	Phe	Ser
			20					25					30		
Leu	Ser	Ser	Arg	Asp	Gly	Tyr	Asn	Asn	Gln	His	Ser	Val	Val	Val	Leu
		35					40					45			
Val	Ile	Val	Thr	Asn	Leu	Cys	Ser	Pro	Phe	Tyr	Gln	Phe	Thr	Ile	Cys
	50					55					60				
Ser	Leu	Pro	His	Ser	Pro	Ile	Asn	Lys	Pro	Ser	Asn	Pro	Ser	Ser	Thr
65					70					75					80
Val	Asp	Phe	Tyr	Ile	Arg	Pro	Ser	Gly	Gly	Phe	Thr	Gly	Arg	Leu	Ala
				85					90					95	
Lys	His	Ala	Gly	Gly	Lys	Ser	Glu	Thr	Val	Met	Leu	Tyr	Gly	Pro	
		100					105					110			
Tyr	Gly	Gly	Val	Asn	Met	Gln	Arg	Leu	Leu	Glu					
		115					120								

<210> 2013

<211> 309

<212> DNA

<213> Homo sapiens

<400> 2013

gcgtatcccc acggctacgg catgaccgcg cttatcgggc cggacctgtc caccgtcgaa
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 gccttgctgc cccaggtcca cagcacacaa accccgggtg acctggccaa tatcaatggc
 120
 gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc
 180
 cgcgggcaacg gcgtcgccaa acgcttgggc gtcagcgtgc cgtccattg tcgctgctgc
 240
 gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgcgcgnc
 300
 nnnccnncn
 309

<210> 2014

<211> 103

<212> FRT

<213> Homo sapiens

<400> 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10				15		
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
		20					25					30			
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
	35					40					45				
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50				55					60					
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75				80		
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85				90					95		
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
				100											

<210> 2015

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2015

acgcgtgcca tgctcggtat ccgcgcggcc caccctcgtt ttgggaccgg cgagttcacc
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 gatctaggcg ggcgggacat ggcagtgatg tccttcctac gtcacaacga gcacgaaacg
 120
 gtccctgtgcc tggctaattc ctccgatact gagcggacgg ttgcccttca ccttccacaa
 180
 ttcgcggggcg tggcggggctc ttctctcctc catggtcagg acgcgcaacc agtaaaagct
 240
 gacggaacac tgctccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggg
 300

gaggagaggt catgaccgct tgggaagac
329

<210> 2016
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2016
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr
1 5 10 15
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe
20 25 30
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser
35 40 45
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
50 55 60
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
65 70 75 80
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu
85 90 95
Gln Met Ser Gly Glu Glu Arg Ser
100

<210> 2017
<211> 457
<212> DNA
<213> Homo sapiens

<400> 2017
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ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggac cctggagcca
120
ggcgacaagc tactggccat tgacaatatc cgcttgaca actgccccat ggaggacgcc
180
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac
240
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgctac
300
gggggtcccc tgggcatcac catttcgggc acggaggaa cttttgacct cattttcatc
360
tcaggcctcc ccaaacgtgg cctggctgag aggactgggt ccatccagtg ggggaaccgc
420
ttcggaccat aacaacgtta ttctcagggc cggacca
457

<210> 2018
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2018
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

1	5	10	15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala	20	25	30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp	35	40	45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu	50	55	60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp	65	70	75
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu	85	90	95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu	100	105	110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu	115	120	125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro	130	135	140

<210> 2019

<211> 483

<212> DNA

<213> Homo sapiens

<400> 2019

cgcgtcggcg acgattttat cctcgggggtt cggtataaccg ccgatgaatg tctcagagaac
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 ggcaccggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgatc
 120
 gactatctca acgtcatcag gggacatcgc gacaccgac cgggcctgac cgacgtcatc
 180
 cccattcagg gcatggcgag cgcgccgcat cttgatttgc caggcgaaat ccgcgcggcg
 240
 accagcttcc ccgtcttcca tgccgccaaa attcaggatg tcgccaccgc ccggcatgcg
 300
 attgccgccc gcaaggtcga catgatcgcc atgaccgcgc ccacatgac cgatccgcgc
 360
 atcgtccgca agatcatgga aaaacaggag gaggacatcc gcccctcgct cggcgccaat
 420
 tattgtcttg atcgattta tcaaggcggc ctgccttctt gcattcaca tgcggcaacc
 480
 ggc
 483

<210> 2020

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2020

Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu	1	5	10	15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg	20	25	30	
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly				

	35		40		45	
His	Ile	Asp	Thr	Asp	Pro	Gly
50					55	Leu
Met	Ala	Ser	Ala	Pro	His	Leu
65				70		Asp
Thr	Ser	Phe	Pro	Val	Phe	His
			85			Ala
Ala	Arg	His	Ala	Ile	Ala	Ala
			100			Gly
Arg	Ala	His	Met	Thr	Asp	Pro
			115			His
Gln	Glu	Glu	Asp	Ile	Arg	Pro
			130			Cys
Arg	Ile	Tyr	Gln	Gly	Gly	Leu
			145			Ala
					150	Phe
						Cys
						Ile
						His
						Asn
						Ala
						Ala
						Thr
						Gly

<210> 2021

<211> 797

<212> DNA

<213> Homo sapiens

<400> 2021

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ngaattcggt cactggctta actcggagca cagcttcacc acgacccatg acaaggaagg
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gtttctctcg agaagggccca gcaagtgtgt ttaaggacat cctcctctct gtccctgcag
120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga cccccgtcc
180
gggagccagt gtcccgctac ccagaaagcc atactcaata atgaaaagct ggtcttgcg
240
ccccgcatct ccagagttaa cggtcgtcgc ttaccctcgc actacttcca ggtggtgacc
300
tgggctgtct tcgtgggctt ttctcgggcc accttcggga tcttcattcc cttctgcct
360
cacgcgtgga aatacatcgc ctatgtggta tccttttcat cgtggcatgg tctaagcggg
420
aggggttctt ggagggacct gcgatggacc tggtgtgggg gtctgggcca tgggtgcccg
480
gtggcaccag tcacctgtcc tgggccagac tatgtcccc gagcctgcag tggggcccag
540
tggccccccta tgggttttggc cagcccccgt taagggtcag gccagggcag cgttggctga
600
gggagttccg gagagggaat ctgtcaggag ggacagcagc cccctggcgt ggccagggag
660
ccgcctgtct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc
720
ctttctcctt gcccttggtg ccaaggagga acagcgccat gcccgcaggt tcggcagcct
780
gcgtttccat gcccaagc
797

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<210> 2022

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2022

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Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
 1           5           10           15
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
          20           25           30
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
          35           40           45
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
          50           55           60
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
65          70           75           80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
          85           90           95
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
          100          105          110
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
          115          120          125
Met Val Leu Ala Ser Pro Gly
          130          135

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<210> 2023

<211> 462

<212> DNA

<213> Homo sapiens

<400> 2023

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naatctccga cgatccctgc cgacgtgctc gccgggtgctc tcaagcaggc taaggaggct
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cgacaccgca tccttgagggt gatgaacgag gccatcgatt ctcccgatga aatggccccc
120
actgcctccg scatcattac cgtccacatc ccagtggaca agatcgggtga ggatcgggc
180
cccaaggggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag
240
gacgatggca gatatttcat cggggctgat aacggagatt cggccgagtc tgcctgttcg
300
atgatcaacg cgatcgctaa cccacagatg cccgaggtcg gtgagcgtaa cctcggcacc
360
gtcgtcaaga cgacgagctt tggcgcttct gtctctctgc tgcccgccaa ggatggctcg
420
ttgcacatct ccaagatgcg tgaccttaac gacggttaac gc
462

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<210> 2024

<211> 154

<212> PRT

<213> Homo sapiens

<400> 2024

```

Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

```

1	5	10	15
Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile	20	25	30
Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val	35	40	45
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys	50	55	60
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu	65	70	75
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu	85	90	95
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu	100	105	110
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly	115	120	125
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser	130	135	140
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg	145	150	

<210> 2025

<211> 872

<212> DNA

<213> Homo sapiens

<400> 2025

cgtggtaacg atttacagga aagaacagct ggaactcgtg ctgggataac caggtagaac
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 120
 agggaggtct gtacctcttc cctcatctca ttttacacaa ggcgacaggt cagaggccag
 180
 ggtgggacga gagcgaggga gcaactgtctc tggcagcagc acttgccact ccacaatgtg
 240
 gagaccagaa cggcacccca gagagcacgg gggaaatggc tcattctttaa aacaatggca
 300
 gaagaaatcc agccaaggtc acttttctct tgtgagcatg ttaagggcca gagagtggct
 360
 acttctctgc ctctgcagc tcctctcagt tggcttggag gagttggcga agcttccaga
 420
 acacgctgga gggtgctctc cgggtgttcc cactggggac cccagggtct gcacattcct
 480
 gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg
 540
 cggaaaaacca atggcgaaat attttgtcac agatgacctg cagggtgttg tttacgcgct
 600
 gcgctccgca tttgttgact cgtaaatcac atcttgaaaa acagtcaaag aaattgcagt
 660
 cttcatctcc tgtgcagttt tgctcaagga tttccctcat tttaggttca aaaaaggcca
 720
 tgtccacatc aatagccacc actgtgaagt cgctccggat ggcaaatgtt tccggttgga
 780
 tgtcgcagag gtggaggcgg tgggtacagt cctgtcgaa atggttcccc atgtccaaga
 840

agctgagtgcc gagggccctg atggccctgg cc
872

<210> 2026

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2026

Met	Gly	Asn	His	Phe	Asp	Arg	Asp	Cys	Thr	His	Arg	Leu	His	Leu	Cys
1				5					10					15	
Asp	Ile	Lys	Pro	Glu	Asn	Phe	Ala	Ile	Arg	Ser	Asp	Phe	Thr	Val	Val
			20					25					30		
Ala	Ile	Asp	Val	Asp	Met	Ala	Phe	Phe	Glu	Pro	Lys	Met	Arg	Glu	Ile
		35					40					45			
Leu	Glu	Gln	Asn	Cys	Thr	Gly	Asp	Glu	Asp	Cys	Asn	Phe	Phe	Asp	Cys
		50			55					60					
Phe	Ser	Arg	Cys	Asp	Leu	Arg	Val	Asn	Lys	Cys	Gly	Ala	Gln	Arg	Val
65				70					75					80	
Asn	Asn	Asn	Leu	Gln	Val	Ile	Cys	Asp	Lys	Ile	Phe	Arg	His	Trp	Phe
				85					90					95	
Ser	Ala	Pro	Leu	Lys	Ser	Ser	Ala	Val	Ser	Phe	Gln	Leu	Gln	Leu	Gln
			100					105					110		
Leu	Gln	Glu	Ala	Val	Gln	Glu	Cys	Ala	Asp	Pro	Gly	Val	Pro	Ser	Gly
		115				120					125				
Asn	Thr	Arg	Arg	Ala	Ala	Ser	Ser	Val	Phe	Trp	Lys	Leu	Arg	Gln	Leu
		130				135					140				
Leu	Gln	Ala	Thr	Leu	Arg	Glu	Leu	Gln	Glu	Ala	Glu	Lys			
145					150						155				

<210> 2027

<211> 721

<212> DNA

<213> Homo sapiens

<400> 2027

tgtaaatga cagaccaagt ataaggcttt ggttgagaga ccagctttta aatattgaaa
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gacaaatata gtgtaaaagg cgcaatggaa ttgtatagt gaaggagatt ctctagtccc
120
agggttgtaa gtgcacttct gtctaattca ttacagaatt acagaatcaa atcatgttag
180
ccctagaaga aactgcagat cattttgttc aatcttctca ttatatagga aaggaaattt
240
gagggccagt gcaatggttt gccaaaggta cacaactagt tagtggaagg atccaggcat
300
tctaattctt ttctttcact aatacatttg gactgctcta cagaattact tctgtctgat
360
actatccatt ttgaagagta gctagcatat agtagccatt tactttttggc tcaattaaaa
420
gcaaacaatt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagccac
480
acagtattaa aacatgcagc ctttctttat gcaaaaagat tgaatatgga gccacttgaa
540

tcttaaactt cagtcctgcag ctataaccaa tatcatcaga agttatacac aattggcaaa
 600
 agaataagctt attctgcccc aatacttgctc cagtcactag gatcatttca cttttttgaa
 660
 taccatttgc tttggggagg gaagtattgc cagaccgtga attcattatt acctctgac
 720
 a
 721

<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

Met	Asn	Ser	Arg	Ser	Gly	Asn	Thr	Ser	Leu	Pro	Lys	Ala	Asn	Gly	Ile
1			5						10				15		
Gln	Lys	Ser	Glu	Met	Ile	Leu	Val	Thr	Gly	Gln	Val	Phe	Gly	Gln	Asn
			20				25				30				
Lys	Leu	Phe	Phe	Cys	Gln	Leu	Cys	Ile	Thr	Ser	Asp	Asp	Ile	Gly	Tyr
	35					40					45				
Ser	Cys	Arg	Leu	Lys	Phe	Lys	Ile	Gln	Val	Ala	Pro	Tyr	Ser	Ile	Phe
	50				55					60					
Leu	His	Lys	Glu	Arg	Leu	His	Val	Leu	Ile	Leu	Cys	Gly	Leu	Cys	Tyr
65				70				75					80		
Leu	Arg	Ser	Asn	Gln	Glu	Ser	Leu	Ile	Leu	Ser	Gln	Lys	Cys	Leu	Leu
			85					90					95		
Leu	Ile	Glu	Pro	Lys	Val	Asn	Gly	Tyr	Tyr	Met	Leu	Ala	Thr	Leu	Gln
			100				105						110		

Ser Gly

<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

<400> 2029

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 120
 gaggcggcgg tgggtggctga gtccgtgggt gcaggaggca aggcgacagc tctaggggtt
 180
 ggcaccggcc ccgagaggag gatgcgggtc cggatagggc tgacgctgct gctgtgtgctg
 240
 gtgctgctga gcttggcctc ggogtcctcg gatgaagaag gcagccaggga tgaatcctta
 300
 gattccaaga ctactttgac atcagatgag tcagtaaaag accatactac tgcaggcaga
 360
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 420
 gaagaggaag acagcctcaa gagccaagag ggggaaagtg tcacagaaga taccagcttt
 480

ctagagtctc caaatccaga aaacaaggac tatgaagagc caaagaaagt acggaacca
540
gctttgaccg ccattgaagg cacagcacat ggggagccct gccacttccc ttttcttttc
600
ctagataagg agtatgatga atgtacatca gatgggaggg aagatggcag actgtggtgt
660
gctacaacct atgactacaa agcagatgaa aagtggggct tttgtgaaac tgaagaagag
720
gctgctaaga gacggcagat gcaggaagca gaaatgatgt atcaaatcgg aatgaaaaac
780
cttaattggaa gcaataagaa aagccaaaaa agagaagcat atcggtatct ccaaaaggca
840
gcaagcatga accataccaa agccctggag agagtgtcat atgctctttt atttggtgat
900
tacttgccac agaatatcca ggcagcgaga gagatgtttg agaagctgac tgagggaaggc
960
tctcccaagg gacagactgc tcttggtttt ctgtatgcct ctggacttgg tgttaattca
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agtcaggcaa aggctcttgt atattataca tttggagctc ttgggggcaa tctaatagcc
1080
cacatgggtt tgggttacag atactgggct ggcattcgcg tctccagag ttgtgaaatc
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gccctgactc actatcgtct tgttgccaat catgttgcta gtgatatctc gctaacagga
1200
ggctcagtag tacagagaat acggctgcct gatgaagtgg aaaatccagg aatgaacagt
1260
ggaatgctag aagaagattt gattcaatat taccagtccc tagctgaaaa aggtgatgta
1320
caagcacagg ttggtcttgg acaactgcac ctgcacggag ggcgtggagt agaacagaat
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1500
gctctccact actttaagaa agctgctgac atgggcaacc cagttggaca gagtgggctt
1560
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1620
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<211> 794

<212> PRT

<213> Homo sapiens

<400> 2030

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 Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu
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 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys
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Phe	Pro	Phe	Leu	Phe	Leu	Asp	Lys	Glu	Tyr	Asp	Glu
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Tyr	Leu	Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys
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											Met

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Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu		
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Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro		
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Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr		
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<211> 662

<212> DNA

<213> Homo sapiens

<400> 2031

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<210> 2032

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2032

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 Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr
 35 40 45
 His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile
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 Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu
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 Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile
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 Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val
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 Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys
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 Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser
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 Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly
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 Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly
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<210> 2033

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2033

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 <213> Homo sapiens

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 50 55 60
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 <211> 495
 <212> DNA
 <213> Homo sapiens

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 <211> 98
 <212> PRT
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 <212> DNA
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Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
   65                70                75                80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
   85                90                95
His Glu

```

```

<210> 2039
<211> 307
<212> DNA
<213> Homo sapiens

```

```

<400> 2039
accggtgata cactctgcga aagcggcgcg gagcgaagcg ttcttggtct tcttcgagat
60
cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctggggccaa
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggcgcatt
180
cggcgtgcgc aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccg
240
aatcgagtc ttcgaaattc ccccttgcca tacatgtcgg ccacgtcgt cagccagagt
300
aacgcgt
307

```

```

<210> 2040
<211> 94
<212> PRT
<213> Homo sapiens

```

```

<400> 2040
Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1      5      10      15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
20     25     30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
35     40     45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
50     55     60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65     70     75     80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
85     90

```

```

<210> 2041
<211> 348
<212> DNA
<213> Homo sapiens

```


<400> 2041
 nnccggcgat gcaggggatc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcttc
 60
 gccagcttcc tgccgttccg cagacgcac gcccgaggcg ggggtgcgcaa ttgcctcgcc
 120
 cagctgggtcg ccaagctgac cctgcccggc atgcccgaca tctaccaggg ctgcgagatg
 180
 tgggacctca gcctgggtcga ccgggacaat cgcgcgcccc tcgactacga gacacgcgac
 240
 gcggcccttg ccggctgggt cgcgaccccg ccggagggaac gcgccgcggc gctgcgcacc
 300
 ctgctgacgg attggcgag cgcgcgcggtc aagctggcgg tgacgcgt
 348

<210> 2042
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 2042
 Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg
 1 5 10 15
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu
 20 25 30
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu
 35 40 45
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser
 50 55 60
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp
 65 70 75 80
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Glu Glu Arg Ala Ala
 85 90 95
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu
 100 105 110
 Ala Val Thr Arg
 115

<210> 2043
 <211> 712
 <212> DNA
 <213> Homo sapiens

<400> 2043
 gatctgacgg tctcgactaa gectgacat tccgaggtca ccgacgccga ccttgccgtc
 60
 gaagattcgg tgcgcagagc cctgtctcga atgcgctccc gggatgccgt ccaaggcgag
 120
 gaacgtgccg ataccgggga tggaccccg cggtggatca ttgatccgat cgaaggcaat
 180
 gcgaatttcc tgcgtggggg ccagtggtgg gccacctca ttgccctcag cgtcgaggac
 240
 cagattgtcg catctgtggg ctctgtctct gccctcaagc gacgtggtg ggcagcccg
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
 360
 gtgcgcaatc ttgccgacgc attcttctgc tactcttcgc tgcacggatg ggtcagagagc
 420
 ggacgagggc acgggttcgg tgaactcatg cggtcgggtg ggcggaccgc agccttcggc
 480
 gattctcgtt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa
 540
 ctacgcctgc acgacatggc cgccctcgac gctatcgcca cggagggcgg cggtaaagttc
 600
 accggctctc atggcaaaaga cggccctggy tctgggaatg ctctggcgtc gaatggtttc
 660
 ctcatgacc aggccctagc catggtccag cctcaggagt gaggaccgat cg
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5					10					15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
		20						25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly
		35					40					45			
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
		50				55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70					75					80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
				85					90					95	
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100				105						110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
			115				120					125			
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
			130			135					140				
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145				150					155					160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
				165					170					175	.
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
			180					185					190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
			195				200						205		
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
			210				215					220			
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225						230									

<210> 2045

<211> 406

<212> DNA

<213> Homo sapiens

<400> 2045

nnttgacac cggcgactat gccgccaccg caccgatcaa tcgcggaccc agggcagggg
 60
 atgcgcggga tgggcgacgg tgatggaccg ggcgctggac ctggcggtgc gcttcgacga
 120
 cantacaggc tttggccgag gcgggttggg agaaaccggt caaccggtgg tttggccccc
 180
 catcaatgcc cagaaccaga agccttgccg attcgtccca gccggttcaa ggccgatggc
 240
 gagatcgtcg cgatgactgg cgacggtgtc aacgacgccc cctcgctcaa ggccgcccac
 300
 atcgggtgtcg ccatggacaa acgcggcacc gacgtcgccg gcgaggcttc gcgcatggtc
 360
 ctgctcgagg atgattttgg atcgatcgtg cagtcgggcc ggctcg
 406

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

Xaa	Trp	Thr	Pro	Ala	Thr	Met	Pro	Pro	Pro	His	Gly	Ser	Ile	Ala	Asp
1				5					10					15	
Pro	Gly	Gln	Gly	Met	Arg	Arg	Met	Gly	Asp	Gly	Asp	Gly	Pro	Gly	Ala
		20					25						30		
Gly	Pro	Gly	Arg	Ser	Leu	Arg	Arg	Xaa	Tyr	Arg	Leu	Trp	Pro	Arg	Arg
		35				40					45				
Val	Gly	Arg	Asn	Arg	Ser	Thr	Gly	Gly	Leu	Ala	Pro	His	Gln	Cys	Pro
	50				55						60				
Glu	Pro	Glu	Ala	Leu	Arg	Ile	Arg	Pro	Arg	Pro	Phe	Lys	Ala	Asp	Gly
	65			70			75						80		
Glu	Ile	Val	Ala	Met	Thr	Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ser	Leu
		85					90					95			
Lys	Ala	Ala	His	Ile	Gly	Val	Ala	Met	Asp	Lys	Arg	Gly	Thr	Asp	Val
	100						105					110			
Ala	Arg	Glu	Ala	Ser	Ala	Met	Val	Leu	Leu	Glu	Asp	Asp	Phe	Gly	Ser
	115					120						125			
Ile	Val	Gln	Ser	Val	Arg	Leu									
	130					135									

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

aagcttttggg acgagacccc tgagctcttgg gttcagcccc gaggaagccc agcaacagga
 60
 tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
 120

tgcctggccgg ccaggagaga gaggatccgg gggcttgttc agtcctagca ctgccacgt
 180
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagt atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggt gagtttagcc tcagtgttgg
 360
 cccccagcga gaggcagcat ttagccacagg gcagcaggac tggagccggg acctctgc
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgtgtc
 480
 tggcttttagc cttcttagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct ggggtctcagg aacttggaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggct
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gaggtctga
 720
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met Gly Lys Arg Gly Trp Val Gly Glu Phe Ser Leu Ser Val Gly Pro
 1 5 10 15
 Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp Ser Arg Asp
 20 25 30
 Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly Ile Ile Gly
 35 40 45
 Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser Lys Met Glu
 50 55 60
 Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly Ser Val Asp
 65 70 75 80
 Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser Ser Cys Val
 85 90 95
 Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val Gly Gln Met
 100 105 110
 Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu Thr Gly Cys
 115 120 125
 Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly Ile Gly Glu
 130 135 140
 Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp Leu Ala Glu
 145 150 155 160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgcgctcgctt acgggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgctgc
 60
 ctgttctctcg ggatagtggt cgggctgatg ccacgtctga tgtgcggggg gattgaactg
 120
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca
 180
 gcctacggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgccccattg
 240
 gcttcggtgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc
 300
 gtccggccgat ggccacgcgt gacccactac ctgctgccgg cgctctctgc tcccctgctg
 360
 cgccacgcca tgttgctct gccgggcatt gcgctggcgc tggcggcctt gggttttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgcct
 480
 tatctcgaac gggcgccctg gggagtcctg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg Val Ala Tyr Gly Ala Leu Asn Thr Ser Leu Leu Ala Leu Ala Val
 1 5 10 15
 Ser Phe Ala Ser Leu Phe Leu Gly Ile Val Phe Gly Leu Met Pro Arg
 20 25 30
 Leu Met Cys Gly Val Ile Glu Leu Ala Asn Ala Pro Pro Pro Ile Ala
 35 40 45
 Leu Gly Leu Leu Val Val Ala Ile Ser Gly Pro Ser Ala Tyr Gly Ala
 50 55 60
 Ala Cys Ala Val Met Leu Val Ser Trp Ala Pro Leu Ala Ala His Cys
 65 70 75 80
 Ala Ser Leu Leu Ala Glu Ala Arg Thr Gln Pro Tyr Ile Arg Met Leu
 85 90 95
 Pro Val Leu Gly Val Gly Arg Trp Arg Thr Leu Thr His Tyr Leu Leu
 100 105 110
 Pro Ala Leu Ser Ala Pro Leu Leu Arg His Ala Met Leu Arg Leu Pro
 115 120 125
 Gly Ile Ala Leu Ala Leu Ala Ala Leu Gly Phe Phe Gly Leu Gly Pro
 130 135 140
 Gln Pro Pro Ser Ala Glu Trp Gly Leu Val Leu Ala Glu Gly Met Pro
 145 150 155 160
 Tyr Leu Glu Arg Ala Pro Trp Gly Val Leu Ala Pro
 165 170

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

gagcaaaaact atcgttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat
 60
 aatagtgtac gtctcggtaa gaattttatgg accgacggtg aaatggggga gccagtaggt
 120
 atttatgcag catttaataga attagatgag gcaaaatttg tggcgtctca aatccaaaat
 180
 tgggtagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa
 240
 tctcgtgtta ttgaagaagc ctgattcgt tgccaaattc cttatcgaat ttatggcggg
 300
 atgcgattct tcgaacgcca agaaaataaa gatcggttg catatttacg ttttaattaat
 360
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgctacgcg t
 411

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5				10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20						25					30		
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
		50				55				60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70					75					80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85						90					95	
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100					105					110			
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
		115				120						125			
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
		130				135									

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgcccatac
 60
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaaagac
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgccgagg cccgactccg caaaccagc accagctgaa ggcctgtgc
 240
 tccttgctg cagagggat gtggacagac acatttgagt ttgtga
 287

<210> 2054
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 2054
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
 1 5 10 15
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
 20 25 30
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
 35 40 45
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
 50 55 60
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
 65 70 75

<210> 2055
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 2055
 nnacgcgttg ttatgaacaa tgacggtgct ctctaccccg atacctgcgt ggggtactgat
 60
 tcccacacca ccatggaaaa tggctcttggc attctgggct ggggcgtcgg tggtattgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tggtggcttt
 180
 aaacttactg gccaaacaca gccgggtgct accgctacag atgttgctct taccattact
 240
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2056
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
 1 5 10 15
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
 20 25 30
 Gly Trp Gly Val Gly Gly Ile Glu Ala Ala Met Leu Gly Gln
 35 40 45
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

```

      50              55              60
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
65
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
      85              90              95
Gly Gly Ser

```

<210> 2057
 <211> 569
 <212> DNA
 <213> Homo sapiens

```

<400> 2057
acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
60
gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
120
caaaatctag ttggacaaaa caacgccag tatggtcgtt atctagcctt tggatgatc
180
ttctgggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcacgtggt
240
ttggatatca cagaagccac tactacaact tcttacacc aagatggaaac gacctttaaa
300
agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac ccaaaaaggg
360
gacaaaaaac ttgattttac agtttggaaat agcttaacag aagatttact tgctaacgga
420
gactactcag cggaatatte taactacaag agtggccatg ttacgacaga cccaaatggt
480
atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt
540
aaaacggacg gaaaagttac tgttcatga
569

```

<210> 2058
 <211> 128
 <212> PRT
 <213> Homo sapiens

```

<400> 2058
Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
1              5              10              15
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Ser Tyr Thr
      20              25              30
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
      35              40              45
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
      50              55              60
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
65              70              75              80
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
      85              90              95
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

```



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                100                105                110
Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His
      115                120                125

<210> 2059
<211> 644
<212> DNA
<213> Homo sapiens

<400> 2059
gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc
60
agcaatcgac ctgtaggact cagccatgat cgactgggca tctctgtata gtcgcgatgc
120
cgcaaacgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac acactgaacc
180
gatcgcctcca gacaacgtgg aagcgataac ctccgctcgc ttctgctgat tctggggcaa
240
gctcgacaag aagaaccgca gagggggcgc ggcttggcca gggagcgcac cttcagcggt
300
cgcttgggtc tcggggacag caaaaagcgg ggaatcagcc aggccacgct cgcgtcatgag
360
tcggccgagg tcgcgcggta cctctctcat ggcttccaca ggaacgcggg cacacaccac
420
cgcgatcgac gcgtgcctct cttgagcctc gttgagga aa tccacggca cagcgtoagc
480
gtagcgggct gctgagggtg caaagatcca cagatccggc gccctggagca actgagccgc
540
cagatcacga ttgcgggtca ccacagatgc gatgtccggg gcacgagga tggccaaaacc
600
tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
644

<210> 2060
<211> 130
<212> PRT
<213> Homo sapiens

<400> 2060
Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
1      5      10      15
Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
20     25     30
Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
35     40     45
Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser
50     55     60
Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
65     70     75     80
Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu
85     90     95
Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
100    105    110
Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

```

115 120 125

Glu Phe
130

<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens

<400> 2061
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag
60
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaaagag
120
acgcccgcac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc
180
acgggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc
240
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
300
tgccacacgc accaggtcct gactgggagt ccggccccca gggcctgtgg atggctggcc
360
tggggccagc ctccgcccc aaggggtgctg gcacctggca tgtgcccgac agttggggcc
420
ggctggtggg aaggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg
480
t
481

<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens

<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
1 5 10 15
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
20 25 30
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
35 40 45
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Ser Lys Ala Pro Asp Arg
50 55 60
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
65 70 75 80
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe
85 90 95
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
100 105 110
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
115 120 125
Leu Leu Thr Arg Leu
130

<210> 2063
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2063
 gccggcgccg togagcgcg gcctttcaat atcagggccc aagacatggg gctgctcatt
 60
 ggggacacca atgccccgca catgctttcc gaaggccaat acgctcccg ccggggcatt
 120
 atcgagcccg tccaatctgc cgcgggttgc tccatccgag agatctcgaa tggcgtggag
 180
 ttgcccga cgcgtcaatcc cgcgaggcg gaactctatc gccgcccgt gcaaccgtg
 240
 gtggaagaaa ccaaccggac cctagatgcc gctaccgccc tggcatcttc cgtatctagat
 300
 acattccggc ggtttatgag cgagagccac atctccctgc gcgaccttta tgaggtcacc
 360
 actccggagc tcgactccgt tttaccgag gccggcgagc tgggcgctcg catgannnn
 419

<210> 2064
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2064
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
 1 5 10 15
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
 20 25 30
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
 35 40 45
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
 50 55 60
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val
 65 70 75 80
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
 85 90 95
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
 100 105 110
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
 115 120 125
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
 130 135

<210> 2065
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 2065
 gccggcgcta tggcctctct gctcgcgcag gccgcccgat ccctcccg cgcaaagggtg
 60

cgcgcgaccg ttactggate ggcgggattg ggaaccgcag aggcattggg ccttactttc
 120
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccgga cgccgacgtg
 180
 cttctcgaac tcgggtgggtga ggatgccaaag atcacctacc ttaagccggt ccccgaaacag
 240
 cgcataaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacacccg acaactcccg cctcaatgac ctgcataccc gagccaagac catccatccg
 360
 atcgctctgc gctgtgggtgt ttttgccaag tccgaccttc agccctcat taacgaggga
 420
 gcccgccacg aggatctggc tgcttcggtc ctgcaggctg tcgccactca gtgcattggc
 480
 ggctctggcat gtggctcgccc gattcgaggt aaggtcatct tccttggcgg tcgccttcac
 540
 tttatgccaa gtttgcgaga cgttttctcg cgcgtcctcg acggtaaggt tgacgcgt
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1			5						10					15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40						45		
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
			50			55						60			
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
			65			70				75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85					90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
				100				105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
			115				120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
			130			135						140			
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
			145			150				155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
			165					170						175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185						190	
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

<210> 2067

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2067

ttccagcaga tgctgcacaac ctggaccgcg agcgggcacgc tgcaggaggc cgtggccaac
 60
 aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg
 120
 tacttcggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
 180
 ccgatcggtt acatggccag ttccaagaac ctgtgcgacc gcacgccgga gctggacttc
 240
 gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc
 300
 gtcaacttcc acgccctggt ctggccggcg atgctcgaag gctcgggcta ccgtaaacgc
 360
 accggt
 366

<210> 2068

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2068

Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu
 1 5 10 15
 Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln
 20 25 30
 Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly
 35 40 45
 Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr
 50 55 60
 Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe
 65 70 75 80
 Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile
 85 90 95
 Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu
 100 105 110
 Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly
 115 120

<210> 2069

<211> 280

<212> DNA

<213> Homo sapiens

<400> 2069

cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg
 60
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctggt
 120
 gcctttggct ggaattccac cccagccttc ttgctcgaag aacgccttc ccccttcaga
 180

tctcatgggc acaggccccc tcttctctaaa cgggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctgatcaag ctttgggtcaa gctcctaccc
 280

<210> 2070

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2070

Met	Val	Glu	Thr	Val	Arg	Val	Gln	Gly	Val	Pro	Glu	Pro	Ser	Leu	Gly
1				5					10					15	
Cys	Met	Gly	Pro	Arg	Arg	Arg	Pro	Ser	Leu	Gln	Thr	Trp	Ala	His	Pro
			20					25					30		
Ala	Pro	Val	Leu	Leu	Pro	Leu	Ala	Gly	Ile	Pro	Pro	Gln	Pro	Ser	Cys
			35				40					45			
Leu	Lys	Asn	Ala	Leu	Pro	Pro	Ser	Asp	Leu	Met	Gly	Thr	Gly	Pro	Val
			50			55				60					
Phe	Leu	Asn	Gly	Val	Arg	Ala	Pro	Ser	Asn	His	Asp	Lys	Asp	Pro	Leu
65					70				75					80	
Leu	Asp	Gln	Ala	Leu	Val	Lys	Leu	Leu	Pro						
				85					90						

<210> 2071

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2071

acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc ttccaccttt gacttcagat
 120
 gctggcgctt ttactttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag ctctactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac
 360
 aatatgttca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2072

Met	Thr	Leu	Ser	Pro	Leu	Thr	Ser	Asp	Ala	Gly	Ala	Phe	Tyr	Phe	Leu
1				5					10				15		
Cys	Gln	Thr	Leu	His	Met	Lys	His	Phe	Trp	Asn	Asn	Tyr	Arg	His	Asp

```

                20                25                30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
      35                40                45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
      50                55                60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
65      70                75                80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
      85                90                95
Ser Thr Leu Arg
      100

```

```

<210> 2073
<211> 339
<212> DNA
<213> Homo sapiens

```

```

<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggtgcct gcgttccctg gctcgtggcc
60
cttctctcca ctttcaagcc agcagcggag gctgagctcc ttctcatgcc atctctctgt
120
tctctctctt gcttctctct ccacactgaa ggacccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
240
ccatctgcct ctttcatctc cctgggcat gtaatgggat tcacagcttc tgggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

```

```

<210> 2074
<211> 85
<212> PRT
<213> Homo sapiens

```

```

<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1      5                10                15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
      20                25                30
His Arg Gly Pro Ser Val Trp Arg Arg Gln Glu Arg Glu Gln Arg
      35                40                45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
      50                55                60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
65      70                75                80
Gly Thr Glu Val Asp
      85

```

```

<210> 2075
<211> 481
<212> DNA
<213> Homo sapiens

```

<400> 2075
 ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa
 60
 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
 120
 atctcagagcg ctcctgccca actgggcctg ctgaggaaga tccgcctctg gcacgacagc
 180
 cgtggggcctt ccccgagctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
 240
 cagggctggt tcttcctctg ccagtgtctg ctgtctgcgg gcaggcatga tggtcgctgtg
 300
 gagcgggagc tcacctgtct gcaaggggga ctggccttct ggaagctttt ctattgcaag
 360
 ttcacagagt acctggagga ttccatgtc tggctgtcgg tgtacagcag gccctcctcc
 420
 agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtctgtg cgtctacgag
 480
 t
 481

<210> 2076
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 2076
 Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn
 1 5 10 15
 Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe
 20 25 30
 Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu
 35 40 45
 Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser
 50 55 60
 Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly
 65 70 75 80
 Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His
 85 90 95
 Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly
 100 105 110
 Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe
 115 120 125
 His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu
 130 135 140
 His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala
 145 150 155 160

<210> 2077
 <211> 1410
 <212> DNA
 <213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatcccaaatgatgtga atactttcag aaaccaatgg
60
caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt ttttttttgt
120
tttttttttt tttttttttt ttttctttc taaagtggct ttaatatcac acaagcggct
180
ctttggctta cagttagaga aaacagaggg agccaggaaa ggctccccg tggcctctgg
240
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag
300
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct
360
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag
420
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct
480
cctccctcgc aagagcaggc ttgtgcacag ccgagcacag gccagccag ggccggcccc
540
gcggctgtgc agcgtctacc agggggagga gttcagccat caggaccttt tccaagtggg
600
tctgtgtgtc cagcacagcc actgcagct tgagggccgc cagggtctgc agctcctggg
660
tgctggagta gacaagcagc tgggnnggct ccattgcagge tccgctctac cccacagga
720
cggcgaggct ccggggggcc tnnccccaca gacatggctt tgggtggctgt tccgccaccg
780
ctgcacgcag ctctgcagc ctgtgcagac actggccacc catggcctgc agcccccca
840
gcgtgagcag gcagcggtag tcctgcattc agtccatggg ggctgctgag agctcctccc
900
tcatgcgcag tctcagcagc gagcaggcct tccgaggcgc ccccgctcc gcctccacct
960
ccacgacct gagcctgggc tggggccgc ctgaagctgt ctgcatgttc tggagggaact
1020
gggtttttggc agcggcgcca tccgtggaat cactggtctg tgtggaactg agctggggcc
1080
acaggctcga gttctgggaa gctgctttcc tgaatgcgc aggcagccgc agcaggtgcc
1140
cctctctcct gagtgtaag gcttctggg cctgaggagc agcggatggg gccatttgct
1200
ggctcctgag gcccgcccc ggccctgggg ttccggctcc catcccaaca cgggtcccat
1260
ccccactga cagcagccgc cgtcagggt ggcccttggc aggcaccgtg gtctggcgga
1320
ggcccttggt ggggtctgtg tctgaagcat ggccaccagc ttggcctggg gaatcggtg
1380
gggcggaggc tgtcgtgcca gaagaggtga
1410

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
 60
 gtactggcgg tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtgggggtac ctggtgaccc aagagttgcg gcgcctgatg
 240
 ggcaaaccta ctcccgctgg ccgcgttcaa tcacccgccg tgtttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcaggtgacg aatcactttg gcgtgcgtct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga ttctcgaaag
 420
 aagcacttcc cctatgttca ggaatagcaac ctggtcagc acgtcgccgg cactcgaaat
 480
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc
 540
 tcatccactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

          35              40              45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
 50              55              60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
 65              70              75              80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
          85              90              95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
 100              105              110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
 115              120              125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
 130              135              140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
 145              150              155              160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
          165              170              175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Ala Ala
 180              185

```

<210> 2081

<211> 319

<212> DNA

<213> Homo sapiens

<400> 2081

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aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
 60
agggttccatc atcaacgggt tccactagta attttgggtg gtggaactgc ctgtactgga
 120
aaatcaacaa tcgctacaca acttgctcag aggcctcaatt tgcctaattg ttgacagacg
 180
gacatgggtg atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
 240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
 300
gttgtagcga agggtttgg
 319

```

<210> 2082

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2082

```

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
 1              5              10              15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
          20              25              30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
          35              40              45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
          50              55              60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```

65          70          75          80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
          85          90          95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
100          105

```

```

<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens

```

```

<400> 2083
nngcctgatt ggcacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg ttggatgga
120
caccagccgg tcatttgtgc tgttgtccgc ttgtggctga aaaaatgtgc ggaatgacgt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaatgctg ttgcacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgcgcaagt gcaaatcga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtaacgt
360
gaaaaggcag gagatgaagg tn
382

```

```

<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens

```

```

<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
1          5          10          15
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
20          25          30
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
35          40          45
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
50          55          60
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
65          70          75          80
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
85          90          95
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
100          105          110
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
115          120          125

```

```

<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens

```

<400> 2085
 nnggatecca aagacgcgga tattgccatg gtgttccaaa actatgccct ctaccgcgac
 60
 atgcatgtcg ccgacaacat gggttttgcc ctcaaaactgg cgaagtggga taagaagaa
 120
 atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc
 180
 aaacccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgtattgtt
 240
 cgttccccc gcgtctcttt gatggacgag cctctttcta acctggatgc gcgtctgcgt
 300
 gtccgcaccc gcgccagat tcgggaactg cagcgcgcc tgggcaccac caccgtttat
 360
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc
 420
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accaccgcc taacgcgt
 478

<210> 2086

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala
1				5					10				15		
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys
		20						25				30			
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala
	35					40						45			
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala
	50				55				60						
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val
65				70					75					80	
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp
			85						90				95		
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg
		100					105					110			
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala
	115					120					125				
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln
	130				135						140				
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	
145					150						155				

<210> 2087

<211> 731

<212> DNA

<213> Homo sapiens

<400> 2087

gataattctc tacacggcat gagctgggga cgtaccccc ttgccaactg cacctcacgg
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgtc gctgcaacgg ctactgcgtc
 180
 ggctcggtatc atcgcagcaa tcaccccctc ccccgagcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
 300
 cgtgatgcag tcatacaacga tgcaaaagctg cgtgcccgga ttgccggtgc gttgggttaa
 360
 gctggattta gttccgcga cgcggtggtc ctacgcccgc gtattgccag agaaatggca
 420
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgtctca ctgatgcgaa gatccagcgt gctgcgcgtc cagtggacac cgccatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtgggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg
 660
 ccattgccgc aactgcgctc aatcccgcctc tcggggccgat cgcaaagact gaggcatta
 720
 aggctgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met Ala Lys Glu Gly Val Leu Leu Ile Asn His His Lys Leu Lys Lys
 1 5 10 15
 Leu Ile Gly Ala Gln Val Gly Leu Leu Thr Asp Ala Lys Ile Gln Arg
 20 25 30
 Ala Ala Ala Ala Val Asp Leu Gly Ile Lys Ala Thr Leu Ala Ala Thr
 35 40 45
 Ile Ile Pro Asn Ala Leu His Ser Ala Ala Phe Lys Asp Ala Val Val
 50 55 60
 Ala Asn Leu Val Ala Ala Gly Leu Thr Arg Ser Trp Gln Arg Leu Arg
 65 70 75 80
 Leu Ser Pro Leu Pro Gln Leu Arg Ser Ile Pro Leu Ser Gly Arg Ser
 85 90 95
 Gln Arg Leu Arg Pro Leu Arg Leu Arg
 100 105

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta ccccatcatc
 120
 ttcgacacgg accacttcga ggggtacgag cgccccgcgc tcgtgctgca cgaagtcacc
 180
 gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggtgggaa
 240
 tcgttggtgg cgtctctcac gactctgtc gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccg
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1			5					10					15		
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25				30			
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
			35					40				45			
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50				55				60						
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75					80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85					90						95	
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
			100					105							

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

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 60
 tgggtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng
 120
 agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gccattttg gtctctgtct
 180
 tctttctct ctgtgtctct ccatttctgt ctctctctct ctgtctctct ccatttctgt
 240
 ctctgtctt ttctctctgt tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccatttctgt ccttcacgc gt
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
 20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
 35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
 50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
 65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Ser Leu Cys Phe Ser
 85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

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tttgtgtgtgg cctaccgcg agagaccag gagatggtgc togatgcgca taaccgcgccc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggccta
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagt
300
gagaatcaag ttgcacaat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1             5             10             15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
 20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Gly Gly Val Pro
 35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
 50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
 65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```


85 90 95
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
 100 105

<210> 2095
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 2095
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 accctgcccc ccgcccgcga tcttctgctt aaacaattcc atattgtgga tgttgccccg
 120
 cgcgtggtgg cgcgtgggttc agtgggcacc cactccctgg tactgctact gtcgggcccc
 180
 aatgatgaac ctcttggct gcaagtgaag gaagccctcc ccagtgtcct caccaccat
 240
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc
 300
 gataatcttg ataagcatat taaagccggc aatggctacc gggtgggtggc gtgccagcag
 360
 attctgcagg ccactcggg tccgctgctg ggggtggacgc gt
 402

<210> 2096
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2096
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp
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 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Lys Gln
 20 25 30
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
 35 40 45
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
 50 55 60
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
 65 70 75 80
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
 85 90 95
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
 100 105 110
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
 115 120 125
 Leu Leu Gly Trp Thr Arg
 130

<210> 2097
 <211> 641
 <212> DNA
 <213> Homo sapiens

<400> 2097
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 gccatgagca aggaggaggc cgaccaggta ctggcgctgc agctggggct gtctgtccgc
 180
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggctggggcc tggccctcac
 240
 tgtcgctgct ccacatgctg tcaactgtct cctcccagt cctgcctcat cctcaacccg
 300
 ccgtccctct gcgtgtcact ctctgctgt cctcactggt tcagggaccc ccagcctctc
 360
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc cctcccgctc
 420
 atgccccctca cactctctct cccccagccc ccgtcctgcg gccccagga cgagcccccag
 480
 ctccagctgg cccctagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
 540
 tcctgcccc tgcagggggc tccctcaga ccagccccgt cgcctctcc taagtcaccc
 600
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 641

<210> 2098
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 2098
 Xaa Phe Leu Thr Arg Pro Pro Ala Ser Ser Ala Ala Val Gly Ser Gly
 1 5 10 15
 Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu
 20 25 30
 Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp
 35 40 45
 Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro
 50 55 60
 Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His
 65 70 75 80
 Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu
 85 90 95
 Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His
 100 105 110
 Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu
 115 120 125
 Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr
 130 135 140
 Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln
 145 150 155 160
 Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg
 165 170 175
 Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala

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                180                185                190
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
                195                200                205
Pro Thr Gly Ser Arg
                210

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<210> 2099
 <211> 347
 <212> DNA
 <213> Homo sapiens

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<400> 2099
acgcgtgtgc cctgtccct gccagacatg gacagcacct gcccacaggg gtgctcagtg
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gaggcagtgcc ccagggtctgc tgtgcccatg cgtgtaccct gtccctctgcc agacgggac
120
agcacctgcc caccgggtgc tcaatggagg cagtgtccac ggctgctgtg cccacgtgtg
180
tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtg
240
cagtattctg ttcaggtgag ctcagaggtg gcaggtgcct ggctgcggcc ctgcctcact
300
ccgacagcct ctgctccag tccactggct catccacat ggctga
347

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<210> 2100
 <211> 106
 <212> PRT
 <213> Homo sapiens

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<400> 2100
Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
1      5      10      15
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
20      25      30
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
35      40      45
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
50      55      60
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
65      70      75      80
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
85      90      95
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
100      105

```

<210> 2101
 <211> 549
 <212> DNA
 <213> Homo sapiens

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<400> 2101
ctctctccga ccgcgttgac ggtccagccg gtccgcacgc cgtcatcgga atcggcatca
60

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acgtttcgaat gggcggtgac gaattgcccc tgcgcacggc gaacctctctg gctctgtgtg
 120
 gggtgaacca cgacaagaat gagttgctgg ccagccttct catceacctt gacgagctat
 180
 taacagtgtg gttggagacc ggaacgggtg gggatcagta tgtggcccg tgtgacacca
 240
 ttggtactcc ggtccgtctg accttcgacc cagaaatcgt ggggtggtggt gagggggcca
 300
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 360
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 420
 ggcgctcctga gcgttccac catctagact gctgactatg acgaccacaca ttttgccct
 480
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 540
 ccctgacct
 549

<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
1				5					10				15		
Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
		20					25					30			
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
		35				40					45				
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50				55				60						
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65				70				75					80		
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85				90					95			
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
			100				105						110		

Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

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 120
 tgggaggggg acgcataatc gtaacaccag gttggtatgg aaatcaaagg gaatgacgtc
 180

ggatcgtcgc gatcgaggc ggtcgggtgc cgggttgagg ctgtgatggc gggcatgggt
 240
 gcgaccgtgc gtgtcttcga cccgtgggcc actcctgatt cttttccagc tggcgtgatg
 300
 gcatgtgatg atctcgatga ggttctgagg ctacagcgca tcctcactct ccacgctcgt
 360
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 420
 tccgtcctcg tcaactgtgc ccgtggctcg ctggctcgac
 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
1			5					10					15		
His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25				30			
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
			35				40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
			50			55				60					
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70				75					80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
			85					90						95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100				105					110			
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
			115				120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
			130				135				140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145							150								

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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 120
 cccctatatg gctccagtcg gttttggggg gggcagctaa gtggggggagg ggaacacaa
 180
 aagtttgggc aaaaacattaa cctgacaaag cttgattccg gaaaaaatc cctcaagagc
 240
 gcaaggccag cttagccaac tggcagctga gtggaaagg tcagtcctct cgggcagctc
 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat gsgtgcaagt
360
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600
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660
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720
ctagaagctc cgagttctct tactcccagc agtgaactca gcagcccagg ccaaagttag
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840
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900
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960
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1020
acagcagcca cggttctgca gcagggcagc ttcagtgtgg atgacgtgca gactgtgagt
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1740
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1800
accaaactct tttttaaat tagaattaac aagaaaaaaa aaaggggtgg gtttatgagc
1860
cttagttctt ggaggattat aagagtactt cccagtttt gaggctggac agttaatata
1920

ctttatatca attatacatt taatataatt taatttataaa taattttaaag attcttagga
1980
gatagtctga ctttcctgac ctatagtgga atgatcagat agggattttt ttgtggcac
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2160
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2280
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2340
gacaagtgtc cagtcagtc cttggtgccag gactgtgtgc ctgggtgcct tgggaaatgg
2400
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2460
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2520
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2580
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2640
cagctgatgt cctctgagta ctgtctgact ccttcaggca agttcctgaa ttcagtacca
2700
tcattattat ttttgtgtaa gactttgaca aagtatagcc cctgccacca gaggcctg
2760
tacagtgggt ctctaagggt ggacctgccc cgggctgccc atgcacgtgt gtgaaacagc
2820
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2880
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2940
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3000
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3120
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3180
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3240
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3300
gagcaagggc ctgaggggtc tctgtcactg ttactggcag aagaaacaca gcagggtgtt
3360
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3540

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 3600
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 3660
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 3720
 atcttatttg aaaatgtag caacttactt gcatttttaa agaccaaaca agagctggta
 3780
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 3840
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 3900
 gtgtatttca ttgtcctttt gtatttatct aaaaggggtg atatgatttt atatcttgc
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 4020
 gttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa
 4057

<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

Ser	Asn	Gln	Ser	Val	Phe	Leu	Leu	Phe	Ser	Asp	Leu	Leu	Pro	Gln	Leu
1				5					10					15	
Glu	Ala	Pro	Ser	Ser	Leu	Thr	Pro	Ser	Ser	Glu	Leu	Ser	Ser	Pro	Gly
			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
			35				40					45			
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
		50				55					60				
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65					70				75					80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
				85				90					95		
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
		115					120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
		130				135					140				
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145				150					155					160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
				165					170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
				180				185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
			195				200					205			
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
		210				215					220				
Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val


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225                230                235                240

<210> 2107
<211> 305
<212> DNA
<213> Homo sapiens

<400> 2107
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agtccttggtct tggctctcgt tccagatctt aatgattctt tgagtccagt ctcaggggag
120
gcctcaggcc tgggtgtctga aaacaccccc agacctgatg acagcagagc tatcgctcca
180
gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat
240
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300
ccnccn
305

<210> 2108
<211> 92
<212> PRT
<213> Homo sapiens

<400> 2108
Met Ala Gln Val Pro Met Leu Asn Leu Leu Pro Ser Pro Gly Leu Ala
1 5 10 15
Leu Val Pro Asp Leu Asn Asp Ser Leu Ser Pro Val Ser Gly Glu Ala
20 25 30
Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
35 40 45
Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
50 55 60
Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg
65 70 75 80
Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro
85 90

<210> 2109
<211> 700
<212> DNA
<213> Homo sapiens

<400> 2109
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acgtttctcca gaogtcccc agccccaggc agtcggcaag caaaggctac gaaaagaaaa
120
taccgaagcgt ccagtgaggc tccccagcgc aaacggagga acgaaacttc atttctccca
180
gccaaagaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaaatg
240

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ttttctccaa agaagcattc ggttagcaca agttagatagaa accaggagga gagacagtgc
 300
 attaagactt catcactgtt taaaaacaac cctgacattc cagaactcca cagacctgtg
 360
 gtaaagcagg tgcaagaaaa agtgtttact tcagctgctt ttcatgagct gggcctccac
 420
 ccacatttaa tttccacaat aaatacggtc ttaaaaatgt ctagtatgac cagtgttcag
 480
 aagcaaaata ttccctgtgtt gctggaaggc agagatgctc tcgtgagatc ccagacgggc
 540
 tcaggtaaaa ttcttgcccta ttgcatccct gtggtccagt ccttcaagc aatggagtca
 600
 aaaatacagc gcagtgatgg ccctatgcc ctggtgctcg tgccaacgag agaggtaagc
 660
 aggctccctt ttgggacaag ttttaagcac atgctttcat
 700

<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

Xaa	Ala	Ser	Pro	Thr	Gln	Thr	Met	Ala	Ala	Ala	Asp	Gly	Ser	Leu	Phe
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Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
		20						25				30			
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35					40					45			
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
		50				55					60				
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
65					70					75				80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
			85						90					95	
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100					105					110		
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115				120					125				
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
		130				135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145					150					155				160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
			165						170					175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
		180						185				190			
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
		195				200					205				
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
		210				215					220				
Gly	Thr	Ser	Phe	Lys	His	Met	Leu	Ser							
225					230										

<210> 2111
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 2111
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 60
 caaatggaaa tcaccccgcaa ggctctgaaa aagcacggtc gcggcaacaa gctggcaatt
 120
 gccgagctgg tggccctggc tgagctgttc atgccaatca agctgggtgcc gaagcaattt
 180
 gaaggcctgg ttgagcgtgt gcgcagtgct cttgagcgtc tgcgtgcccc agagcgcgca
 240
 atcatgcagc tctgcgtacg tgatgcacgc atgccgcgtg ccgacttctt gcgccagttt
 300
 ccgggcaacg aagtggatga aagctggacc gacgcactg
 339

<210> 2112
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 2112
 Thr Arg Cys Ala Gly Pro Asp Pro Ile Ile Ala Ala Gln Arg Phe Gly
 1 5 10 15
 Ala Val Ser Asp Gln Met Glu Ile Thr Arg Lys Ala Leu Lys Lys His
 20 25 30
 Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu
 35 40 45
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
 50 55 60
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
 65 70 75 80
 Ile Met Gln Leu Cys Val Arg Asp Ala Arg Met Pro Arg Ala Asp Phe
 85 90 95
 Leu Arg Gln Phe Pro Gly Asn Glu Val Asp Glu Ser Trp Thr Asp Ala
 100 105 110
 Leu

<210> 2113
 <211> 2329
 <212> DNA
 <213> Homo sapiens

<400> 2113
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 60
 atcacagtaa tctggggcgt gtccccagaa gacaatggca acccactaaa tcccaagagt
 120
 aaaggggaagt tgacattaga tagcagtttt aacatcgcca gccagcttc ccaggcctgg
 180

atTTTgCact tctgtcaaaa actgagaaac caaacattct tttaccagac tgatgaacag
240
gaCTTcacca gctgcttcat tgagacattc aaacagtTga Tggaaaacca ggactgtgat
300
gagCctgccc tgtaccctatg ctgcagccac tggagcttcc cctacaagca agagattttt
360
gaactgtgca tcaagagagc tatcatggag ctggaaagga gtacagggta ccatttggat
420
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480
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540
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600
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660
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720
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780
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840
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900
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gccctgacca ccttcgtggc agggggccatg atgattccct ccacagTtct agcttacacc
1020
cagctgggca ccttcatgat gctcatcatg tgtatcagTt gggtcttctgc cacttctttt
1080
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1140
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1200
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1260
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1320
aagaccactt atgaagagac ccacatctgc tctgaatttt tcaacagcca agcaagaat
1380
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1440
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1500
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1560
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1620
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1680
caccocatca cgcacatcca ccactgtccc tgccTgcagg gcagagTaaa gccagccgga
1740
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1800

gaaaaaattg gcaagaccaa tgtacacagt cttcagagga gcatagaaga gcatcttcca
 1860
 aagatggcag agccatcgtc atttgctctgc agaagcactg gatcggtact caaaacgtgt
 1920
 tgcgaccccg agaataaaca aagggaactc tgtaaaaata gagacgtgag caatctggag
 1980
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 2040
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 2100
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 2160
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 2220
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 2280
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 2329

<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

Xaa	Tyr	Lys	Lys	Leu	Phe	Met	Phe	Glu	Arg	Val	His	His	Gly	Glu	Glu
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Leu	His	Met	Pro	Ile	Thr	Val	Ile	Trp	Gly	Val	Ser	Pro	Glu	Asp	Asn
			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
			35				40					45			
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
			50				55				60				
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
			65			70				75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
				85					90				95		
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100				105						110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
			115				120					125			
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
			130			135					140				
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
			145			150				155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
				165					170				175		
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180				185					190			
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
			195			200						205			
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
			210			215					220				
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

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225          230          235          240
Ile Ile Ser Leu Tyr Ala Ile Ile Ser Ile Ala Gly Thr Ile Phe Val
      245          250          255
Thr Val Gly Ser Leu Val Leu Leu Gly Trp Glu Leu Asn Val Leu Glu
      260          265          270
Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val
      275          280          285
His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly
      290          295          300
Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala
      305          310          315          320
Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val
      325          330          335
Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile
      340          345          350
Ser Trp Ala Phe Ala Thr Phe Phe Phe Gln Cys Met Cys Arg Cys Leu
      355          360          365
Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln
      370          375          380
Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly
      385          390          395          400
Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly
      405          410          415
Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala
      420          425          430
Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Thr His
      435          440          445
Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro
      450          455          460
Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp
      465          470          475          480
Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys
      485          490          495
His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys
      500          505          510
His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu
      515          520          525
Cys His Gln Cys Ser Pro Thr Thr Ser Ser Phe Val Gln Ile Gln Asn
      530          535          540
Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val
      545          550          555          560
His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val
      565          570          575
Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His
      580          585          590
Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val
      595          600          605
His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu
      610          615          620
Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys
      625          630          635          640
Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val
      645          650          655
Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys

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        660                665                670
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
    675                680                685
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
    690                695                700
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
    705                710                715                720
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
    725                730                735
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
    740                745                750
Leu Leu Ile Lys Thr Leu
    755

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<210> 2115

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2115

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120
ggtcttgggt ccttgagacc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtggtca ttctcagat cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccggtggg cagctggggc gggtygacct ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc ttccaggggc
420
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461

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<210> 2116

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2116

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Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
1          5          10          15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
20        25        30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
35        40        45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
50        55        60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
65        70        75        80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

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      85                      90                      95
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
      100                      105                      110
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
      115                      120                      125
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
      130                      135                      140
Thr Arg
145

<210> 2117
<211> 360
<212> DNA
<213> Homo sapiens

<400> 2117
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120
atcaggtgac actcgcggtg gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
acccaagagg ccttcgataa gctcaccag gagctggagt acctcaaagg cgaaggccgc
240
accgtcattg ccaacaagat tgcgcagccc cgttcggaag cgcacctttc tgaagacggc
300
ggctaccatg cgcgccgtga ggagcagggg caggccgagg cccgcattcg tcaactcgag
360

<210> 2118
<211> 70
<212> PRT
<213> Homo sapiens

<400> 2118
Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
1 5 10 15
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
20 25 30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
35 40 45
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
50 55 60
Arg Ile Arg Gln Leu Glu
65 70

<210> 2119
<211> 465
<212> DNA
<213> Homo sapiens

<400> 2119
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60

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 180
 actgtttctg ggctgttctc ctacgataaa gccgactcaa aagccattac aacctctctt
 240
 acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagaaa gccagtc aaa atattggatc atcagatcat
 360
 gacggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
 cccctccaga agaatttgtt taaattttgt ctgtcccttc acgcg
 465

<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

Met	Gly	Cys	Lys	Gly	Asp	Ala	Ser	Gly	Val	Cys	Tyr	Lys	Met	Gly	Val
1				5				10				15			
Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25				30			
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
		50				55				60					
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
		65			70					75				80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90					95		
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
			100					105							
Leu	His	Ala													
		115													

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

cggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca
 60
 tgtggctctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt
 120
 ggaggttctt ttgttacaaa atacaacaag acaaacctgc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtg cgaggagagt
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccttgattat attcctggtg
 300

tttctgatta ttgtgacac aatagccttg cttggt
336

<210> 2122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2122

Pro	Asp	Lys	Val	Asn	Gly	Met	Lys	Thr	Ser	Arg	Pro	Thr	Asp	Asn	Ser
1				5					10					15	
Ile	Asn	Val	Thr	Cys	Gly	Pro	Pro	Tyr	Glu	Thr	Asn	Gly	Pro	Lys	Thr
		20						25					30		
Phe	Tyr	Ile	Leu	Val	Val	Arg	Ser	Gly	Gly	Ser	Phe	Val	Thr	Lys	Tyr
		35					40					45			
Asn	Lys	Thr	Asn	Cys	Gln	Phe	Tyr	Val	Asp	Asn	Leu	Tyr	Tyr	Ser	Thr
		50			55						60				
Asp	Tyr	Glu	Phe	Leu	Val	Ser	Phe	His	Asn	Gly	Val	Tyr	Glu	Gly	Asp
65				70						75				80	
Ser	Val	Ile	Arg	Asn	Glu	Ser	Thr	Asn	Phe	Asn	Ala	Lys	Ala	Leu	Ile
			85					90						95	
Ile	Phe	Leu	Val	Phe	Leu	Ile	Ile	Val	Thr	Ser	Ile	Ala	Leu	Leu	Val
			100					105					110		

<210> 2123

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2123

aactgggccc agttcgccaa cctgcacccc ttcgccccgg ccgagcaaag cgctgggtat
60
cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacagggtta tgacgcgcatc
120
tccttcgcagc cgaacgctgg ctcccagggg gagtacgcgg gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgtcgc gacatctgcg tgattccgctc ctctgcccac
240
ggcaccacac ccgcaaccgc caacatggcc ggcgatgcgg tggtcgtgac cgcttgcgac
300
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccggaacac
360
ctcgcggcgc tgatgatcac ctaccgctcg acccacggcg tgttcgaaga aggcattccgc
420
gagatc
426

<210> 2124

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2124

Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

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      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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<210> 2125

<211> 285

<212> DNA

<213> Homo sapiens

<400> 2125

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ngtatggcat ctgetgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggt
120
ctaaaggcgg ctgaagacgc ggcaccaccc gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaac agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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<210> 2126

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
 atggcagcca agatgcttgc attgttcgct ctcctagctc tttgtgcaag cgccactagt
 60
 ggcagcgata ttccagggca cttgtcacca gtcatgccat tgggtacccat gaacccatgc
 120
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttggcc
 300
 agcatgatgt cgcaaatgat gatgccaaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgctgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
 1 5 10 15
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2129
 acgctgact tggatgaacaa acccatatcc atcaccacct tcgggtgtga tacggaata
 60
 ctacacccct ttgacaagcg gcgtgatgcg aacggcggtg acgggggtggt gcgcacgagg
 120
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcattccgtgc cttcagtcgg
 180
 gtccatgatg aacggccctaa taccgtcctt cgtatctggg cgggcggccc agacagagaat
 240
 cccctcaagg tcttggtctg ccgtcttctc ccggacgggt cgggtggagtt tcgcggtgcc
 300
 attgatcatt ctgaggctcag aaatgccttg ggtagtttgg acatctttgc cgcc
 354

<210> 2130
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 2130
 Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val
 1 5 10 15
 Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly
 20 25 30
 Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys
 35 40 45
 Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu
 50 55 60
 Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn
 65 70 75 80
 Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu
 85 90 95
 Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser
 100 105 110
 Leu Asp Ile Phe Ala Ala
 115

<210> 2131
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2131
 gcattcggcg cattggttat gtgtgcctat tccattggtt atgtggaagg ttgggcatcag
 60
 ccagacagtc attatgatgg ttgtttacag ctggggcgagt ggggctttcg aatcaatgac
 120
 ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa
 180
 caacgccccc acttgcttta tgacatagac ggtattgttt ataaagtga tcagattgac
 240
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaaatt
 300

cctgctcaag aagaagttac gcgt
324

<210> 2132

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2132

Ala	Ser	Arg	Pro	Leu	Val	Met	Cys	Ala	Tyr	Ser	Ile	Gly	Tyr	Val	Glu
1			5						10				15		
Gly	Trp	Asp	Gln	Pro	Asp	Ser	His	Tyr	Asp	Gly	Leu	Leu	Gln	Leu	Gly
		20						25					30		
Glu	Trp	Gly	Phe	Arg	Ile	Asn	Asp	Leu	Met	Lys	Thr	Val	Glu	Gly	Ala
		35					40					45			
Ala	Gly	Cys	Ile	Glu	Tyr	Tyr	Glu	Met	Leu	Asn	Glu	Gln	Arg	Pro	Asp
	50					55				60					
Leu	Ser	Tyr	Asp	Ile	Asp	Gly	Ile	Val	Tyr	Lys	Val	Asp	Gln	Ile	Asp
65			70						75					80	
Leu	Gln	Glu	Glu	Leu	Gly	Phe	Ile	Ala	Arg	Ala	Pro	Arg	Trp	Ala	Ile
			85						90					95	
Ala	Arg	Lys	Phe	Pro	Ala	Gln	Glu	Glu	Val	Thr	Arg				
			100						105						

<210> 2133

<211> 292

<212> DNA

<213> Homo sapiens

<400> 2133

ggtacctgca atatggtatt gcatgacatg aataaaatttt tccttactct gaactcacta
50
gtggctgtct ttagaggacc cggcgaaactt ttccctgcttt ttccacttg ctccatcaca
120
tatcatcatat caccaacacac catcacatata atcacacatg atgaacggcc atcaggccac
180
accagattac atcgtgtgtg atccaaccct gcatttttctt gccctctcct tactgcgagt
240
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134

<211> 93

<212> PRT

<213> Homo sapiens

<400> 2134

Met	Val	Leu	His	Asp	Met	Asn	Lys	Phe	Phe	Leu	Thr	Leu	Asn	Ser	Leu
1				5					10					15	
Val	Ala	Val	Phe	Arg	Gly	Pro	Gly	Glu	Leu	Phe	Leu	Leu	Phe	Pro	Thr
		20						25					30		
Cys	Ser	Ile	Thr	Tyr	Ile	Thr	Ser	Pro	Thr	Pro	Ile	Thr	Tyr	Ile	His
		35				40					45				
Ser	His	Glu	Arg	Pro	Ser	Gly	His	Thr	Arg	Leu	His	Arg	Cys	Gly	Ser

```

      50              55              60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
65              70              75              80
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
      85              90

<210> 2135
<211> 439
<212> DNA
<213> Homo sapiens

<400> 2135
acgcgttcca ttggtgtgtc gaatttcaag accgagcadc tggacgccat cgagggggcc
60
actccgagcg tcgacccaaat cgagatgcac cctcgttca accaggcgac ctteccgcga
120
gagctggccg agcgcggcat taacccggag gcctggagcc cgctggggca gtcgaaggac
180
ctcgacaatc cgtctctcac cgatatattcc aaggcgactg gaaagacgcc tgcccagggtg
240
gtcattcgtt ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gaccatcca
300
cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
360
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgactcttga
420
ttctgcaaca ataaccggt
439

<210> 2136
<211> 139
<212> PRT
<213> Homo sapiens

<400> 2136
Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
1      5      10      15
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
20      25      30
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
35      40      45
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
50      55      60
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
65      70      75      80
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
85      90      95
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
100      105      110
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
115      120      125
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
130      135

```

<210> 2137
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2137
 nnccctttgcc ttggctgata ccctcaccac ctgggaacat ccccagaca cccctctaac
 60
 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
 120
 aagaaggagg agctgaagga gtccagctt ctgctcgcca ataaagcgca ctccaggagc
 180
 tcttcgggtg agacaccgcg tcagccagag aagacgagtg gcatggaggt ggctcgtac
 240
 ctggtggctc agtatgggga gcagcgggcc tgggacctag cctccatac ctgggagcag
 300
 atggggctga ggtcactgtg cgcccaagcc
 330

<210> 2138
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 2138
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Ala Asn Lys Ala
 20 25 30
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80
 Ser Leu Cys Ala Gln Ala
 85

<210> 2139
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 2139
 gaggcgttga ggcgccagaa caccgggacg aacagcaacc tgcgggacat ggccggccag
 60
 gtgaacaagc tggcgagtac catcgccagc tacaacgacg agatttccaa agtcaccacc
 120
 gccgcgggtg ccccgaaacga cctgctggac cagcgcagcg aggcgggtgcg ccagttgttc
 180
 gagctggtcg ggaccacaggt ggtccagcgc ggttcgagtt atgacgtcta tateggcagc
 240
 ggtcagcgcc tgggtgatggg caacagcacc aacacctgtg ccgagtgccc gagcaaggac
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga taccacctcc
 360
 acgggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgaccg
 420
 tcgatcaacg cgt
 433

<210> 2140
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 2140
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp
 1 5 10 15
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn
 20 25 30
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
 35 40 45
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
 50 55 60
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
 65 70 75 80
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
 85 90 95
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
 100 105 110
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
 115 120 125
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
 130 135 140

<210> 2141
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 2141
 nnatatccat gcagcgatcc tcataatatt gctgtgttat taggctttgg tgcgacggct
 60
 gtttatccctt atctttctttt cgcgttgatc aatgatattg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgatc tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atctgtcta aaatgggtat ttcaacgatt gcctcttacc gtggtgcgca attgtttgaa
 240
 gcgggttggtc tggataactaa agtggctcgac ctttgtttca aaggcggtgc aagtcgtacc
 300
 aaagggtgctc gttttgaaga ttccagcgt gatcaagcaa cgattgcaa taatgcttgg
 360
 aagttacgta aacctattca acagggcggc tatcttaaat acgtacatga ctctgagtat
 420
 cagcgcg
 426

<210> 2142

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2142

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Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1           5           10           15
Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20           25           30
Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35           40           45
Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50           55           60
Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65           70           75           80
Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85           90           95
Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
100           105           110
Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
115           120           125
Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
130           135           140

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<210> 2143

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 2143

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gccggcttga caagcatgtt caccgggtgac gctgtcgtga tcgtcagagt gagccaattg
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tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
120
cttctcctcg ctactcgctg cgctgatgat gcgcaggcgc ccgttgcga taacctcggg
180
acggtcctca gccccctcaa ctccctcatt cgcgagccgg cgaattcgct agtcaacggg
240
acgctcaaga gcacatatga gtacctccgg ctcatcgacg gtcacgatct acccgacgac
300
gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatgggtgga
360
gacagtcggc agggccacgt caccacaactc atggcgggcgt catccctgaa aacctcaac
420
gcgttgtccg acaaggagag atcagagggtc gacaaaacgta cccgcctgcc gaagggtcgc
480
atcacgagaa agacggtgat gacggatctg cccatcgaga cgatgaggcg ggagatcggc
540
ctgtccaacg acgggttgtg cctcacaccg tggaagggtca agacgacttc ttccgaggag
600
gctcggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgccc
660

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gagaaatggg ggtgggagtc gatctcggac gggtatttgc gccatctcga gacctacagt
 720
 ggcccagagta cgactatcgc gatggccttg tcggcgcgca ataccgtctc tacattgtct
 780
 cgttcccagt tgcaacgcac cggcgacagt ctccgcgatg cgccatatcc gaggaaggac
 840
 cttggtccgg cgctcattcg caatggaaaag ccggtcaagg acaagtgcag tatcgaatcg
 900
 gcgtacctgt tgagggtattc cgggaattgg gcgtggtgac atgacggttt cttggcaagg
 960
 ttgtaccaag acattcccct cgggcgattc cgcgcgtagg ggggtgcac
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met Phe Thr Gly Asp Ala Val Val Ile Val Glu Val Ser Gln Leu Cys
 1 5 10 15
 His Ile Val Arg Ser Met Ser Phe Gln Arg Phe Leu Ala Gly Val Ala
 20 25 30
 Ala Ile Leu Leu Leu Pro Thr Ala Cys Ala Asp Asp Ala Gln Ala
 35 40 45
 Pro Val Val Asp Asn Leu Gly Thr Val Leu Ser Pro Ser Asn Ser Leu
 50 55 60
 Ile Arg Glu Pro Ala Asn Ser Ser Val Asn Gly Thr Leu Lys Ser Thr
 65 70 75 80
 Tyr Glu Tyr Leu Arg Leu Ile Asp Gly His Asp Leu Pro Asp Asp Asp
 85 90 95
 Gly Tyr Ala His Asp His Leu Val Ala Ala Leu Arg Pro Tyr Leu Val
 100 105 110
 Asn Gly Gly Asp Ser Arg Gln Ala His Val Thr Gln Leu Met Ala Ala
 115 120 125
 Ser Ser Leu Lys Thr Leu Asn Ala Leu Ser Asp Lys Glu Arg Ser Glu
 130 135 140
 Val Asp Lys Arg Thr Arg Leu Pro Lys Gly Cys Ile Thr Arg Lys Thr
 145 150 155 160
 Val Met Thr Asp Leu Pro Ile Ala Thr Met Arg Arg Glu Ile Gly Leu
 165 170 175
 Ser Asn Asp Gly Leu Cys Leu Thr Pro Trp Lys Val Lys Thr Thr Ser
 180 185 190
 Ser Glu Glu Ala Arg Trp Ala Met Gln Ala Leu Ala Ser Ala Asp Leu
 195 200 205
 Phe Ser Asn Ala Lys Asp Ala Glu Lys Trp Gly Trp Glu Ser Ile Ser
 210 215 220
 Asp Gly Tyr Leu Arg His Leu Glu Thr Tyr Ser Gly Pro Ser Thr Thr
 225 230 235 240
 Ile Ala Met Ala Leu Ser Ala Ala Asn Thr Val Ser Thr Leu Ser Arg
 245 250 255
 Ser Gln Leu Gln Arg Ile Gly Asp Ser Leu Ala Asp Ala Pro Tyr Pro
 260 265 270
 Arg Lys Asp Leu Gly Pro Ala Leu Ile Arg Asn Gly Lys Pro Val Lys

Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
275 280 285
290 295 300
Trp Ala Trp
305

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<210> 2145
<211> 389
<212> DNA
<213> Homo sapiens
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<400> 2145
tctagaatcg tgtataacat tctacacaat aagctaaagc tactcttgta gagtgcgac
60
atgacaaccc ttgaacaatc attatctcaa attcccgcat ttctgattat tcatgaacat
120
ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggtgtg
180
acacagctca ttaaccttgc ttaactaat gcttcaaatc atcttgagaa tgaagaccgt
240
atttgcttag accttgggtt aaattatatt catattccaa ttgattggga gatgccttct
300
gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaatgtgt
360
tggatacatt gcgcacaaaa taaacgcgt
389

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<210> 2146
<211> 109
<212> PRT
<213> Homo sapiens
```

```

400> 2146
Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile
1 5 10 15
Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
20 25 30
Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
35 40 45
Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
50 55 60
Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
65 70 75 80
Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
85 90 95
Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
100 105

```

```
<210> 2147
<211> 235
<212> DNA
<213> Homo sapiens
```

<400> 2147

ctccctgcgg gctgcgtctc cgaggacatg tgcagtcttg acccctgttt caatgggtggg
 60
 acttgctctg tcacctggaa tgacttcac tgtacctgcc ctgccaattt cacggggcct
 120
 acatgtgccc agcagctgtg gtgtcccgcc cagccctgtc tcccacctgc cactgtgtgtg
 180
 gcggaggcca cgttcgcga gggcccccc gccgcgtca gcgggcacaa cgctg
 235

<210> 2148
 <211> 78
 <212> PRT
 <213> Homo sapiens

<400> 2148
 Leu Pro Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys
 1 5 10 15
 Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr
 20 25 30
 Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys
 35 40 45
 Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Val Ala Glu Ala Thr
 50 55 60
 Phe Arg Glu Gly Pro Pro Ala Ala Phe Ser Gly His Asn Ala
 65 70 75

<210> 2149
 <211> 1474
 <212> DNA
 <213> Homo sapiens

<400> 2149
 ntactgccac cattggaact ttgatgttg atggggaaga gttgcaacac ctccagggtt
 60
 gtccctgtga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg
 120
 caacacgtgg gagtaagact tctcctgctc ttggccagtg gtctgaggtg atgaaccacc
 180
 ctggcttggt gtgctgtgtc cagcaaaact caggggtgcc gctggttagtt atggtgaaac
 240
 cagacacttt tcttatccac gagattaaga ctcttctctc taaagcgaag atccaagaca
 300
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgtctg
 360
 gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgcacatc gcatcatgaa gctgttcga aagcgaaaa
 480
 cagctacaat cacaaccng cagctctagc caggtgactt tcccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat
 600
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgagg
 720
 atccagattg ggactcaagc aatagaacgg gccccgcat atatcgagat ctctggcaga
 780
 actatgcagc tcaacctgag tcgctcaagc tgggttgact tccccctcac cagagaagaa
 840
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcggtgga tccagcagg
 900
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
 960
 gatgagcccc cagaagaatt ccttctgccc tctgtcagca acatctgccc ttcacaaatct
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccaactacgac cagtggaaat
 1080
 gtccctggaga ggctgggtgt gaggctctta gaagccctgg aaagctgctt tgccgttggc
 1140
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg
 1200
 tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac
 1260
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaatttgc
 1320
 agtgctgaca gggaatcaaa taagttagct ctctattgta aagcaacagc acagcaaagt
 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaaa
 1440
 attctcaagt gccactcaaa actgagggta agcc
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser Leu Phe Glu Ser Ala Lys Gln Leu Gln Ser Gln Pro Xaa Thr Ser
 1 5 10 15
 Ser Gln Val Thr Phe Pro Ile Asp Phe Glu His Asn Gln Gln Leu
 20 25 30
 Thr Asp Val Glu Phe Gly Gly Asn Asp Leu Leu Gln Val Tyr Asn Ala
 35 40 45
 Gln Gln Ile Lys His Arg Leu Asn Ser Thr Gly Met Tyr Val Ala Asn
 50 55 60
 Thr Lys Pro Gly Gly Phe Thr Ile Glu Ile Ser Asn Asn Asn Ser Thr
 65 70 75 80
 Met Val Met Thr Gly Met Arg Ile Gln Ile Gly Thr Gln Ala Ile Glu
 85 90 95
 Arg Ala Pro Ser Tyr Ile Glu Ile Phe Gly Arg Thr Met Gln Leu Asn
 100 105 110
 Leu Ser Arg Ser Arg Trp Phe Asp Phe Pro Phe Thr Arg Glu Glu Ala
 115 120 125
 Leu Gln Ala Asp Lys Lys Leu Asn Leu Phe Ile Gly Ala Ser Val Asp
 130 135 140
 Pro Ala Gly Val Thr Met Ile Asp Ala Val Lys Ile Tyr Gly Lys Thr

```

145          150          155          160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
165          170          175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
180          185          190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
195          200          205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
210          215          220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
225          230          235
Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
245          250          255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
260          265          270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
275          280          285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
290          295          300
Gln Gln Ser Lys Val Glu Gly Gly
305          310

```

<210> 2151

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2151

```

gccggcgcttt acctgtgggg cccggtcggg cgcggcaaga cctggctgat ggatcaattc
60
caccaaagcc tgnnccgggtg ccggcgcnng cggcagcact ttcatacatt catgggctgg
120
gtgcatcagc gctcctttca gttgaccggg atcgccgacg cattcggggc gctggctcgt
180
gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tgttcgtcaa tgacatcggt
240
gacgcgatca ttctcgggcg cctgttttcag gtgatgttcg acgcaggcgt ggtgggtggtc
300
tgcaactcca atctgcgcgc ggtacagctg tatgccgacg gcttcaaccg cgacgccttc
360
ctgcccgcga tcaccgcgat caaacagcac atgcaagtgg tcgcgggtgaa tggcgcggaa
420
gatcatcgct tgcattccgg cgccatcgag cagcgttact gggtcgctct gccggagcag
480
ggtagcgcgt tgagccaggt gttcgacgcg t
511

```

<210> 2152

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2152

```

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

```

```

      1           5           10           15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln
      20           25           30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu
      35           40           45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala
      50           55           60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly
      65           70           75           80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly
      85           90           95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala
      100          105          110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys
      115          120          125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu
      130          135          140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln
      145          150          155          160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala
      165          170

```

<210> 2153

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2153

```

nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcagggtg
60
tcagtacgtg caccggcgatt ggcggcgcca attgggacca ctccgcgctg atcaaggggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagccccctt
240
atgtcggctg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
caccctccgc atgtccttga accttatctg cccgctgacc gcacaggcgc tgtgattgtg
360
attggggccg gcaaaaccgc acccgccatg gccctcgtcg tcgagaacgg ctggcaaggc
420
gaagtcacgg gcctgggtgt caccgcgtac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcaccg ggtgccggat gccgccggcc tggcgggtg
528

```

<210> 2154

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2154

```

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```



```

      1             5             10             15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20             25
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35             40             45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50             55             60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65             70             75
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85             90             95

```

<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

```

gtgcaccgcc acggcacacc cgccatgccc cgccgctatt tcgaggccct gctgcaggag
60
ttcgcccccg actgcgaggt gctcacgcgc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttcog tgatgaagtg ctgccctact atgcgggcga cgcgctgcgc
180
gcgcgcgaac tggcggccaa tgacttcaaa tactggggagc tgatgcgacg cgcctgtgcg
240
cgcgccctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
      1             5             10             15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20             25             30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Ala Gly
      35             40             45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50             55             60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65             70             75             80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85             90

```

<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aagggtgagcc actttccggc
 60
 cttagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt
 120
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttccggc
 240
 catgcccgag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgaggtgcy tcatcttgct gctaattgcc atctggccaa agcaaccggt
 360
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
 420
 gtaccgcgag ttgttggtcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcgggtgagga gggattcttg
 540
 tcagtcgtca ccgtgggtcga caccgcctcg gcgtcagtggt tgtctcgccc ggcgatccag
 600
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc
 660
 gagctagaga aggcgatggc cggtggtatg gacgataccc accggttgca a
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa Arg Asp Asn Glu Val Val Ile Ile Ser Thr Gly Ser Gln Gly Glu
 1 5 10 15
 Pro Leu Ser Ala Leu Ala Arg Ile Ala Asn Arg Glu His Arg Asp Ile
 20 25 30
 Glu Val Gly Glu Gly Asp Thr Val Leu Leu Ala Ser Ser Leu Ile Pro
 35 40 45
 Gly Asn Glu Asn Ala Val Tyr Arg Val Ile Asn Gly Leu Thr Lys Leu
 50 55 60
 Gly Ala Ala Val Val His Lys Gly Asn Ala Leu Val His Val Ser Gly
 65 70 75 80
 His Ala Ala Ala Gly Glu Leu Leu Tyr Ala Tyr Asn Ile Val Arg Pro
 85 90 95
 Arg Ala Val Met Pro Ile His Gly Glu Val Arg His Leu Val Ala Asn
 100 105 110
 Ala Asp Leu Ala Lys Ala Thr Gly Val Asp Glu Asn Asn Val Val Leu
 115 120 125
 Val Glu Asp Gly Gly Val Ile Asp Leu Val Asp Gly Val Pro Arg Val
 130 135 140
 Val Gly Lys Val Asp Ala Ser Tyr Ile Leu Val Asp Gly Ser Gly Val
 145 150 155 160
 Gly Glu Leu Thr Glu Asp Thr Leu Thr Asp Arg Arg Ile Leu Gly Glu
 165 170 175
 Glu Gly Phe Leu Ser Val Val Thr Val Val Asp Thr Arg Ser Ala Ser

```

          180              185              190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
    195              200              205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
    210              215              220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
    225              230              235

```

<210> 2159

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2159

```

tcgcgagcac actccagcct ctggagagac gacaacgcgt gaagggggcac cagcttgccg
60
ggcagcagct ccagggggcgg cctggggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgttttga aaagtgtctc ctgcagatgg tgggtgagag ttgcctgccca gggccactgt
180
cttccttccc ctgcggagac ttcttcccca ccttctctaaa gctgtggggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacacctt ggggctacca
300
tgggggcctt ctggtttctc tt
322

```

<210> 2160

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2160

```

Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
  1           5           10           15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
    20           25           30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
    35           40           45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
    50           55           60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
    65           70           75           80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
    85           90           95
Ser Val Leu Ala
    100

```

<210> 2161

<211> 1070

<212> DNA

<213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca
 60
 gtgggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaggtta
 120
 ggctatacag ggggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggcattaa
 180
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 aggagactta tatgcaaaaa tcgcaaaaga ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagtggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagttaagag
 480
 ccagggcata aggttttctg gtccaggaag ctttgttgga aaaatgttag aagtaatggg
 540
 ttgtgtcagt atggtagagag gtgagagagg ctaaatggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tccatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcagtg gcccatgggg aggggagtat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaaag gaatggaaga
 840
 agaaagttaa ggggttcctgc tgatgtgagg ggatgactgg aggaaggca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaaaggac catcgtataa aacagacaaa agttaagact agatggagtg
 1020
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile
 1 5 10 15
 Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
 20 25 30
 Leu Ser Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
 35 40 45
 Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
 50 55 60
 Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
 65 70 75 80
 Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser

```

      85              90              95
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
      100              105              110
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
      115              120              125
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
      130              135              140
Tyr
145

```

<210> 2163

<211> 657

<212> DNA

<213> Homo sapiens

```

<400> 2163
tatttaaatc tttataaaaa aggtaggagg atcaggactt cgacccccct aaaacgcggc
60
ggctccctc caatccacct ccacttccta caccacccc gctctcccc ccccccttt
120
tgggtccggg ttggaagggt gggtagaatg ggaaccgaat accaatttca cccgggaacc
180
agtaatgcc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg
240
ccagtggggt ggaattgggt taagccccct cccagccttt ctccgacgcg gtgctccgtc
300
agacatgcc aagaggctct tctccaggag agccacctgt gaaaccacc cggcatgctc
360
ctccaccac tgtgcacaga cgagtgcctg ggctccagag agggaggagg ctgaaggcct
420
cagacaggag tccgtcccggt ccagtcccat catccaaga aacatccggc ccgactccct
480
gcagctccat ggtcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaa
540
ttgatccct tcccaagag gaagagtgt acctagggag aagtgtggtg cgcacaggca
600
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657

```

<210> 2164

<211> 152

<212> PRT

<213> Homo sapiens

```

<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
1      5      10      15
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
      20      25      30
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
      35      40      45
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
      50      55      60
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65		70		75		80									
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
				85				90						95	
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
			100					105					110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
			115				120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
			130				135					140			
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145							150								

<210> 2165

<211> 962

<212> DNA

<213> Homo sapiens

<400> 2165

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nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggga
60
gcccaggggc ccgcctgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaatc accccagcgc ctcattcccc gaattctgttc gccatctgct gtcgcccctg
180
cgcttaaggc atcaccacac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tccgtgttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggcctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc cgggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgcgtcg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttatcgcgcg agccgcgcaa cgtcgcggtt cctgggatga acgtctggaa
780
tccctcgtcg ttgatgccgt cgtgcgagcc gacgcccgat aacagctcat ctgcgcagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggag gggcccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaa gcatgcagat gacggtgcta
960
gc
962

```

<210> 2166

<211> 239
 <212> PRT
 <213> Homo sapiens

<400> 2166
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1 5 10 15
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
 20 25 30
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
 35 40 45
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50 55 60
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 65 70 75 80
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr
 85 90 95
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
 100 105 110
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
 115 120 125
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
 130 135 140
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
 145 150 155 160
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
 165 170 175
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
 180 185 190
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
 195 200 205
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
 210 215 220
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
 225 230 235

<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 2167
 accggtgcag ttgtgaggg gttggtgacg ccggtcggg aggttcacgc cgtcacggcg
 60
 catccacatt atcccgactg gaagatctcg ccaggttacg gacagtggtc gcgtagcgaa
 120
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcgccg tcccacggcg
 180
 attcttcgag cgggtgtctga ggtgacgttc ggggtgcgtc tctgcgccgt ccgttgccga
 240
 agcaccgcgg cgattgtggc tgtgtcgcgc gccttgctct cgacgcggtc ggcggggtcg
 300
 tgcgctgacg tcccacagca taccc
 325

<210> 2168

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2168

```

Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1             5             10             15
Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
      20             25             30
Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35             40             45
Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50             55             60
Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65             70             75             80
Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
      85             90             95
Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
      100             105

```

<210> 2169

<211> 309

<212> DNA

<213> Homo sapiens

<400> 2169

```

gaggacgcct acgtgctcat caccacgggc aagatctcgg cgatcgccga cgtcctgccg
60
atcctggaga aggtcgctcaa ggccggcgaag ccgctgctcg tcatcgccga ggacatcgac
120
ggggaggccc tgtccaccct cgtcgtaaat aagatccgcg gtaccttcag ctcggtggca
180
gtcaaggcgc ccggtctcgg tgaccgcgcg aaggcaatgc tgcaggacat cgccaccctc
240
accggtggtc aggtcgtcgc tcccagaggt gggctcaagc tcgaccaggt gggcctcgag
300
gttcagggc
309

```

<210> 2170

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2170

```

Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1             5             10             15
Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
      20             25             30
Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35             40             45
Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

```



```

      50              55              60
Gly Phe Gly Asp Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
65              70              75              80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
      85              90              95
Val Gly Leu Glu Val Gln Gly
      100

```

<210> 2171

<211> 518

<212> DNA

<213> Homo sapiens

<400> 2171

```

cgcgtaatgt gtattaaggt ccttggtggc tcgcacgcgc gttatgcagc aatcggatgt
60
atcatcaaaag tttcagtgaa ggaagcaatt cctgcggaa aaattaaaaa aggtaaatgtt
120
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
180
cgttttgatc gcaacgcagc ggttatcttg aatgcaaaac accagccagt cggtacacgt
240
atctttggcc ctgtaacccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
300
ggccagaaag tactgtaagg aaccgaaaaa ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt gcgggtaaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
420
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaaac caaacctca
480
agcgggcggtg gaaggcgaa tcattgaaca gaatgcat
518

```

<210> 2172

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2172

```

Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1              5              10              15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
20              25              30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
35              40              45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
50              55              60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65              70              75              80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
85              90              95
Ile Val Ser Leu Ala Pro Glu Val Leu
100              105

```

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

 <400> 2173
 nntggggaag aaatgccggt gcattgcactt tgtgcagcat taggtgcagg ggtgatgcag
 60
 cgggcgcggt ccttttgcgg cggggttttcg agcattcatc tgggtgcatgc attttgcgat
 120
 gcattttcttg tatcctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac
 180
 ccgcagggac gcattggaata cctcgtgaaa tggaagggat ggtgcagaaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaggga
 300
 agagagatgg agctctatgg ccccaaaaag cgtggaccca agcccaaac cttctctctc
 360
 aaagcgccagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgaact agccagggggc
 420
 atccgatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175
 cgcgacaccc tctttggtgg gcgccttcct tctccgaatt cgcgaaccct ccagactctg
 60
 gccacggagg ttgtcgagcg tggagccgat atcggcattg ccaactgatgg tgacgcagac
 120
 cgccctcggtta tcattgatga ccagggggcat tctctgcate ccaaccagat cctcgtattg
 180
 ctgtacacct accctctgga ggacaaggga tggcagggtgc cctgcgtgcg taacctcgcg
 240
 acgacccacc tgcctgaccc tgctgccgag gccacgggc agacctgtta cgaggtaccg
 300
 gtccgattta agtgggtgtc gtccaagatg gccagagacca acgccgtcat cgggtggtgag
 360
 tctccgggtg gtttgacct ccagggggcat attgcaggca aggatgggtgt ctatgctggc
 420
 accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt
 462

<210> 2176
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2176
 Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr
 1 5 10 15
 Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly
 20 25 30
 Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln
 35 40 45
 Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr
 50 55 60
 Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala
 65 70 75 80
 Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys
 85 90 95
 Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu
 100 105 110
 Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln
 115 120 125
 Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val
 130 135 140
 Glu Met Ile Ala Lys Arg Gly Lys Lys Leu
 145 150

<210> 2177
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 2177
 ctcgagaatc atgacggcga cgacgtgact atctccacc gtgtgctcgc tgacggcggg
 60

accttggaact cgattgtcgg cgtgctggcc ggggcatect ggtatcagcg ggagatccac
 120
 gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct cttgtccac
 180
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttg cgcagcgagc tgacaccgtg
 240
 tggcggggtg cgggtgacca ggctggctcg aagtcgcgca gtcgacgtct gccggtcgcg
 300
 gttcctgacc ctgagacgtg cggcgctatc aaagacggcg aggatattcc ggaagccgag
 360
 gtcatcgcg ccatgtctgg ccggcgcccc cgtacagctg cccgtogaat ggcaagcagc
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10					15		
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20						25				30			
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35					40				45				
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55				60					
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65				70						75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90					95		
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
		100						105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115					120					125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
		130				135						140			
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgacac
 60
 aagacgtcga tgcctcagga tctggaacgc gaccgcgca tggagatcga cccgctcgtc
 120
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cggccacgct cgatgtcgtg
 180

ctcccactga tcaagcaacg tgaattcatg acgaagcccg atgccgtggc ggccgcgcag
 240
 gaacgtctcg ctaaagcggc ataaaccagc cgcgaaacc agcggcataa cgcggg
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgcgcgg gatggatcat agtctggctc gatgcatcac gtgcgcgcgc
 60
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacycacctc
 120
 acgtctggcat cgcggaagc ggggtgtcgc agcgaactga acgtgcgcga cgggtcgatg
 180
 gtgcgcgcgg ggcagacgct cgcgaagatt tcgggctctc cgaagctctg gctgatcgtc
 240
 gagattccgg aagcgctcgc gctogatgcg cgtccgggca tgaccgtcga cgcgaagttc
 300
 tcgggcgcat cgacgcagca ttccaccggg cgtatccgcg agatcctgcc gggcatcacc
 360
 accagtagcc gcacgcttca ggcgcgc
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

                20                25                30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35                40                45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50                55                60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
      65                70                75                80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85                90                95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100               105               110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
      115               120               125
Arg

```

<210> 2183

<211> 310

<212> DNA

<213> Homo sapiens

<400> 2183

```

aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggg ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggg tcaagagggg attctaggag atacaagaaa tatctcctgg
180
gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccaggga
240
atagggatga aaaccataaa ctcttttggg tgggtattaa cttatcanc c aaagttacca
300
tanataatgg
310

```

<210> 2184

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2184

```

Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1      5      10      15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
      20      25      30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
      35      40      45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
      50      55      60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
      65      70      75      80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
      85      90      95
Val Phe Gln Ala

```

100

<210> 2185

<211> 723

<212> DNA

<213> Homo sapiens

<400> 2185

ngaatatcca tgcagcagct cgtcgacaat ttgacgggtg ccattccctga cgaatcttgac
 60
 tctctttgtga ccttgcccgg agtcgggtcgt aagaccgcca atgttggttt aggttaatgcc
 120
 ttccggcatcc ccggaatcac ccgggacacc cactcatgc gggatattctg acgtctgggg
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgacccg
 240
 tctgaatggg tgatgttgtg tcaccgcctc atctgggcacg ggcggcgccg ctgtcactcg
 300
 cggcgctcctg cctgcgggggt atgcccgggt gccgagtggt gcccgctctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga
 420
 acgtttttcgg cgcggtgatg gccgccttga tgtttgctgg ctccggggga gatcggggca
 480
 tagctcatca gogtgaaaaa gccggaatac cgggggtgct gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccgggccc gccacagagg gccgggccat gccgatcac ggtctgcaat
 600
 gccttgggtga ggggcccacg atctccatgt ctccgggcac atcgaggggc gtgaccgtcg
 660
 tgacgatctg ggcgtcgtgg tgcgaccat gtcgtagtga ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2186

Xaa Ile Ser Met Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```

                100                105                110
Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala
                115                120                125
Thr Leu Val Arg Glu Pro Arg Arg
                130                135

<210> 2187
<211> 342
<212> DNA
<213> Homo sapiens

<400> 2187
nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag
60
cccgccatat gctgcaacgc caacaccgct ttgccgtcgc atggcatctc cactccggat
120
cgcatcgatc cagcagggct atcggcgcga aagaagtgc cggggcaaaa tcccgccgag
180
gaaagcccgga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggctgccagc
240
ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
300
gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
342

<210> 2188
<211> 51
<212> PRT
<213> Homo sapiens

<400> 2188
Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala
1          5          10          15
Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp
20          25          30
Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln
35          40          45
Val His Pro
50

<210> 2189
<211> 1412
<212> DNA
<213> Homo sapiens

<400> 2189
ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
60
cgttcttcca cgcatgcta gatgccgggg tcaacctgcc gccatcgtgc tttagggcct
120
ggttctcttc ggacgtctac gacgacgaag ctttcgaggt ttccgcgcc gccctgccga
180
ggsgtgccea ggcgctgcc caggtgatca gtgcctgaca cgggctgac ttcgcaggtc
240

```


atcgaaggcaa tctgtgcctg gttcgaacgc aacggacgcg atctgcctg gcgcgcaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgaagtggatg aaccgctggc ccacctctga tgatttggcg
 420
 gaggaaggact ctggggaagc ggttgccgcg tgggggcccgc tgggttaccg cgcctggggc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac
 540
 agtgacgacg agctcgtcgc cctcccggtt attggcgact acaccgcgag cgcagtcgtc
 600
 tcttttgcgt ttggcgggcg cgccacagtg cttgacacca atgtacgtcg cctcatcgct
 660
 agagcagagt ctgggatcgc aaactgtcca acctcggtga cgagggttga gcgggttagtc
 720
 gccgacgcgt tgggtccga cgaagacgtc cgagcgccca agtggggcgt ggctcgatg
 780
 gaattggggg cactggtatg caccggcgcg tctccgcagt gtgaggtctg cccgatccg
 840
 gatggctgca ggtgggtgat cgacggttag cgcgacaatg ccccgcccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaaggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca cgatgatgc
 1140
 cgctgggtta tccttagagg cgttctcaa attggatcg ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca
 1260
 cattgtgcac catctgcgtt ctttggggca ctcgagatcc atcgagatc tttaaccaat
 1320
 gttcgggtgc tctacatcga cyattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttcggggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser Val Pro Asp Thr Gly Leu Thr Ser Gln Val Ile Glu Ala Ile Cys
 1 5 10 15
 Ala Trp Phe Asp Ala Asn Gly Arg Asp Leu Pro Trp Arg Arg Pro Gly
 20 25 30
 Thr Ser Ala Trp Gly Val Leu Val Ser Glu Val Met Ser Gln Gln Thr
 35 40 45
 Pro Met Ser Arg Val Ile Gly Pro Trp His Glu Trp Met Asn Arg Trp

50	55	60
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala		
65	70	75
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser		80
	85	90
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser		95
	100	105
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser		110
	115	120
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr		125
	130	135
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys		140
145	150	155
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val		160
	165	170
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu		175
	180	185
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys		190
	195	200
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn		205
	210	215
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys		220
225	230	235
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys		240
	245	250
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg		255
	260	265
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn		270
	275	280
Leu Ile Ser Leu		285
290		

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgtcg agaattctcta ctccctgccgc aacaacgtcc ggcttcgtca ggctcacgat
 60
 gactcccttg acgacgacac catttcgggg ggtagccac atgggtgctg cctcatggac
 120
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
 180
 agagtattgc tgaattctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
 240
 cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
 300
 gccgcccggaa aagtgcgtcg ccaacttttc gataaccggg ttcgectcaa ctacctggtc
 360
 aacctcaagt ccggcctgtg tccccgaagc tgctcctatt gctcgacgct tctgggatcg
 420
 cgtgccgaga tcacgaaata ctccctgggccc gatccgcaga aggtacacga cgccgctcgag
 480

gctgggattg ccggtggtgc ac
502

<210> 2192

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2192

Leu	Asn	Leu	Ala	Asp	Met	Thr	Glu	Arg	Gly	Leu	Arg	Gly	Glu	Ser	Ile
1				5					10					15	
Thr	Arg	Glu	Glu	Ala	Leu	Glu	Ile	Leu	Arg	Ser	Ser	Asp	Asp	Glu	Leu
			20					25					30		
Met	Ser	Ile	Ile	Ala	Ala	Ala	Gly	Lys	Val	Arg	Arg	His	Phe	Phe	Asp
		35					40					45			
Asn	Arg	Val	Arg	Leu	Asn	Tyr	Leu	Val	Asn	Leu	Lys	Ser	Gly	Leu	Cys
		50				55				60					
Pro	Glu	Asp	Cys	Ser	Tyr	Cys	Ser	Gln	Arg	Leu	Gly	Ser	Arg	Ala	Glu
65					70				75					80	
Ile	Thr	Lys	Tyr	Ser	Trp	Ala	Asp	Pro	Gln	Lys	Val	His	Asp	Ala	Val
			85					90					95		
Glu	Ala	Gly	Ile	Ala	Gly	Gly	Ala								
			100												

<210> 2193

<211> 321

<212> DNA

<213> Homo sapiens

<400> 2193

ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggacc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggaccaca
120
atactctctc tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcatgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagaggtccc actgcctcgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2194

Met	Gly	Asn	Ala	Glu	His	Gly	Gln	Ser	His	Arg	Leu	Ser	Ser	Leu	Ala
1				5					10					15	
Phe	Trp	Thr	Gln	His	Thr	Pro	Leu	Ala	Asn	Trp	Val	Leu	Leu	Asp	Leu
			20					25					30		
Thr	Gly	Pro	Tyr	Trp	Thr	Gln	His	Thr	Pro	Leu	Ala	Asn	Trp	Gly	Phe

```

          35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
   50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
   65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
          85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
          100              105

```

<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

```

naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgtgtgcat gctccctggc
   60
gacggtgtgg cacaccccaa ctttggcaat atcgctccacg acctggtgct gttgcacagc
  120
ctgggtgtgc gtctgttact ggtccacggt tcgcgccgcg agatcgacag cogccttgag
  180
gcacgaggcc tgggtgccga ttaccacaag ggcattgcgt tcaccgatgc atcaacgctc
  240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg ctttctgatg
  300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgag tagccagcgg caacctggtc
  360
actgcgcggc cgateggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
  420
cggttggaac gcaagggcat caaccgcctg ctctgatgag ctcgattgt gctgctgtcg
  480
cccttgggtt actcgcccac cggt
  504

```

<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

```

Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
   1              5              10              15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
          20              25              30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
          35              40              45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
          50              55              60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
          65              70              75              80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
          85              90              95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

          100              105              110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
          115              120              125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
          130              135              140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
          145              150              155              160
Pro Leu Gly Tyr Ser Pro Thr Gly
          165

```

<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

```

acaagtcctg cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgcgggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggg gctactcagc ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaaatgc accgttgctg
240
ctgtgtccta gcccggtctgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtggggcg tatgaaggtg ttgatcaacg c
351

```

<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1      5      10      15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
20      25      30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
35      40      45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
50      55      60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65      70      75      80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
85      90      95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
100      105      110
Gly Ile Asp Gln Arg
115

```

<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgccggc cgccaagatc tgcaccccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctctaaa
 120
 ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgctt gcctgcctgc
 180
 cgttgctggg ggcgccccacc tcgcccagcc atgccaggcc cggccaccga cgcgggggaag
 240
 atccctttct gcgacgcca ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
 300
 ggccggcccg agaggccagg cgcgcggggg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtccctgatga gcttgctcca ctggggggcc gtgtactccc tgggtgctcat ccccaagcc
 420
 aagccactca ctctgctctg gggtaagtc cgcgggc
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
 1 5 10 15
 Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
 20 25 30
 Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
 35 40 45
 Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
 50 55 60
 Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
 65 70 75 80
 Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
 85 90 95
 Ser Glu Gly Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
 100 105 110
 Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu
 115 120 125
 Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
 130 135 140
 Leu Leu Trp Gly Lys Ser Arg Arg
 145 150

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgctcgtggat ggtgggtcgca aattacatgt ttgtggtaac
 60
 aacctcgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 gggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcadc tacgttcaac gaagcatgat
 300
 gatttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1			5					10						15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
			20					25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35					40				45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55					60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65				70					75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
			85					90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcaccag ccgggggtggg aagctgtgca gacagcccg gatctggggac
 60
 gtgatggaaa actcaacaga ctggttcaga tcttggtccc gagccagag gcaccggggg
 120
 cccccagggc tgtttctccc tggccacacc agtaccceac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgctctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
                20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
                35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
                50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
                85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnngng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatc agcttctggg atcaacagga gccggtgatt
120
gtcgctcctg aagtggacac ctctcctct tccgtcagca aggagcgcga ctgcatgggt
180
gtctttgata attgcaatga gttttctggt aacatcacgc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
ccgcacctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
                20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
                35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
                50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```



```

      85              90              95
Pro Arg Lys Asn Pro Ala Leu Trp Asp Leu Gly Ile Ile Gln Ala Lys
      100              105              110
Thr Arg Ser Leu Arg Asp Arg Trp Ser Glu Val Pro Arg Lys Leu Glu
      115              120              125
Phe

```

<210> 2207

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2207

```

atctccaacc cagagaccct ctccaatata gccggcttcg agggctacat cgacctgggc
50
cgcgagctct ccagcctgca ctcaactgctc tgggagggcg tcagccagct ggagcagagc
120
atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
180
accccaggta gggggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
240
agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg
300
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttgtt ttttgtcaca
360
aggtcctcgg ggggtcagcc ctcaactgcc cgcagctcga gttactcgga agccaacgag
420
cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggaagcc
480
cgcacgctgg atggggaggc aggtcctccc gcgggccccg acgtcctccc cacagatggg
540
caggcgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
600
gcagggtggt ccacggtggt gggggcaggc cagacaccaa ccacaccagg cacctccgag
660
ggcgcgcg
667

```

<210> 2208

<211> 222

<212> PRT

<213> Homo sapiens

<400> 2208

```

Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
1      5      10      15
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
      20      25      30
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
      35      40      45
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
      50      55      60
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

```

65              70              75              80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
85              90              95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
100              105              110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
115              120              125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
130              135              140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145              150              155
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
165              170              175
Pro Thr Asp Gly Gln Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
180              185              190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
195              200              205
Ala Gly Gln Thr Pro Thr Pro Gly Thr Ser Glu Gly Ala
210              215              220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

```

ngggaagtgtg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacett ggggatgttt tccccatta gggccctgag
240
ctctatggaa gcacttaact gctgtttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgtgtgtgt ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1              5              10              15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
20              25              30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
35              40              45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
50              55              60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65 70 75 80
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
85 90

<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens

<400> 2211
ctgaccacat ctcogacgat cctagacctc tgttctgcat ctcggacacc accgactgct
60
cactgtacc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
120
aggaagagg ggaaggggat ggatccatgt actttggggt tggagaaatg ggggacagca
180
agtctctca acccaaatac agccccctg ggaggtctct gcccctctc tgtgtagt
240
gagccacgt gcaaggcggt cctgccagg acaaacccac caaaagggaa gatgtgttag
300
aaccaaagag aggtctccctg aaagaggcgt ctccgggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggt caagtctgtg cggacctga ccgcctcaga gaacgagagc
420
atgcgcaaa tcatgcccat caccaagtcc agcagaggcg ccggtctggg gcgaccagag
480
ctgtcatccc ggg
493

<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens

<400> 2212
Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
1 5 10 15
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
20 25 30
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
35 40 45
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
50 55 60
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
65 70 75 80
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
85 90 95
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
100 105 110
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
115 120 125

<210> 2213
<211> 327

<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatecgtc gccagcatt
 60
 gccggtgctt cgacacactg ggttatatcg cctctaaagc acaggtctac gaaggttctg
 120
 acggaaggcc cggccaatcc gatcgggcc tcggcgctgc gcatcatccg ggcgcgctg
 180
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tctgtgggag
 240
 atcgcccggt tggtcgacgc gatcacgtca cgggacgagg aagccgccca cgtgacctg
 300
 ctgaccaca atcgacgc gttggaa
 327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5					10				15		
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20				25						30		
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
			35				40					45			
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70					75				80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85						90					95	

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgccctacat cactcgctcg atcatcctcg agctgctgac agtcgtgatc
 60
 ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagctac
 120
 acccgttacc tcactctcgt gcttgacctg ttgcaggcaa cggccttcgt cacgcttgcc
 180
 acctccggcc gtctattcac cnnatcagct ntgccagctg tctactccac ctcggtcttc
 240
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgctcat gtggatgggt
 300
 gagctcatca ccgaccgcgg tatcggaac ggtatgtcga tcatgatctt cactcagatt
 360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgcgcggtcag
 420
 gctcacgcgt
 430

<210> 2216
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2216
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
 1 5 10 15
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
 20 25 30
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
 35 40 45
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
 50 55 60
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
 65 70 75 80
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
 85 90 95
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
 100 105 110
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
 115 120 125
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
 130 135 140

<210> 2217
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2217
 accagggcgg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcggggc
 60
 atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
 120
 catgcccctgg agggccacgt cccaggtcgg gtcaccacgc cggacgccca agtcattcag
 180
 acctgtgccg tgttgctgta ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
 240
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
 300
 gttttcgaga ccgccgaacg catggtgggg ctggccgccc ccgacgtggt gtgggtctct
 360
 gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcga
 420
 cgagagaatg tctttgctca gtcc
 444

<210> 2218

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2218
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1 5 10 15
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
 20 25 30
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
 35 40 45
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
 50 55 60
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
 65 70 75 80
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
 85 90 95
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
 100 105 110
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
 115 120 125
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
 130 135 140
 Phe Ala Gln Ser
 145

<210> 2219
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2219
 acgcgtaccg tcgttggcat gagcgtcctg ccactggaaa ttggctgtc attcagctac
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 ggcatcacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttgggag
 120
 tggctgatcc ttttccccgc tgggtggctg accagcgctt tggctcagta ggggttcggt
 180
 ggaatgttcc atagtgtgca gattgcgct catgtcagca gttaccacgg catcatggtc
 240
 gctttcgcgc tcgttgggta cggatggctt gcatgcaca acttgcgtca cctgatgag
 300
 cgctattcga ttgcctcggc cttgataatc ggcatcgcca tccagttcac ctgggaggca
 360
 gtgctgatga tctcgggtat caggccgctt acatggcgcc cgcttggtat cgattctctc
 420
 atcgagacga atctcggcgc tccgttcctg ttgctcattg tgaaagcttg gcgcgcgccca
 480
 cccgaaggaa ttcttggtc taccagtcgg cgcggcggcc ccgtggacc agcgcgagtc
 540
 tatattgagg atgactctgt tctcgcgcgc cttctacagc gtccttgaga gcctctgcga
 600
 gcgaaggcgc cgggtgtagg tctccccggg gtcgttgttg gtccctcctc tcgctgacgc
 660

agagccgtgt gatgaggcga agtcatga
588

<210> 2220

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2220

```
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
 1          5          10          15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
 20          25          30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
 35          40          45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
 50          55          60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
 65          70          75          80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
 85          90          95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100          105          110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115          120          125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130          135          140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145          150          155          160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165          170          175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180          185
```

<210> 2221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 2221

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 60
aaagaagagc aaaccgccat cgctaacgct ctttccgaca tggacaccca actcgagccc
120
ctacaacaac gccctcagtaa aacaaaaacc atcaagcaag gcatgatgca agaactactc
180
acaggggaaaa cgagggttgt atgagccaca aggtgaattt agtgcagtag ctggataagc
240
gtattatctc ggtaaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atgggtcaca gagaacctaa atgcgctgat gattgattta cgaattttac
360
gtaacaaatc ggcttatcgg ctggggagcg tggtttttca ttatcataat gaacctgtag
420
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acaacgagaa taccacaag ctggatattg tagacggcca gcaacgtacc ttaacctgt
 480
 tgctgctagt caaagccatt ttagaagaac gggtgtctgc gtaaacgct
 530

<210> 2222

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2222

Thr	Ser	Val	Ala	Ala	Ile	Tyr	Thr	Arg	Asp	Leu	Leu	Gln	Leu	Ser	Leu
1			5					10				15			
Ile	Leu	Pro	Pro	Lys	Glu	Glu	Gln	Thr	Ala	Ile	Ala	Asn	Val	Leu	Ser
		20					25					30			
Asp	Met	Asp	Thr	Glu	Leu	Asp	Ala	Leu	Gln	Gln	Arg	Leu	Ser	Lys	Thr
		35				40						45			
Lys	Thr	Ile	Lys	Gln	Gly	Met	Met	Gln	Glu	Leu	Leu	Thr	Gly	Lys	Thr
	50				55						60				
Arg	Leu	Val													
65															

<210> 2223

<211> 482

<212> DNA

<213> Homo sapiens

<400> 2223

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 60
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga
 120
 tgcatattatc caacggcccg gacagggccg gcagttcaca gtccagtttg taaagcgctg
 180
 cgcgtctctgc gctgatatag gcttgagat gccccatggc gtgtcgggca acctcgtagt
 240
 tcaggccgtc gagcaccaca aggatgacgt tgtgcttcac aaggggagac gctccccaac
 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtggggcg gggaagccc
 360
 gctcccacac aagcccgctg ccacattgga tctccaatgt gggctacagc cttactgcac
 420
 attgatgatg acttcttctc gccacttctg cggcagtgcc ttggaggctc tttcccacgc
 480
 gt
 482

<210> 2224

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2224

Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

1	5	10	15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His			
	20	25	30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
	35	40	45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
	50	55	60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
	65	70	75
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
	85	90	95
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
	100	105	

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

```

naccgctctg atccacacgg gccactgacg tggcggttatg acaggggagcg ggccgggtgcc
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ggcgctcatcc tcgatctcat gggtcacgga gaggatctcgc tccagtatct actcaaaggg
120
cgattcactg aggtgtccgc cgtgtccgag acgttcaccc gtcagcgctcc caagccactc
180
aaggagggca tcggccacac aggttggggtc gtctcggagc agctcggggcc ggtgggcaac
240
gaggattatt gcgctgtcat cggccgcatg gaaaacggag tgatgtgcac cctggagctcc
300
agtcgggtca gtgttgggcc gcgcgaggag tacatcgctg agatctatgg aaccgacgga
360
tcaatccggg ggaacttcga ggaatctcaac catttgcagg tctgtctggg gcgaacaac
420
cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccga gttcatgcgt
480
ttccaacccg gagccggaac atccatgggc tttagacgaca tgaaggtcgt tgaggtcgcg
540
aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatgggttg
600
gcctcagcgg aggtcaacga tgcgatcgtt gcctcctcgc ggggaccatg cctggcatga
660
cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc cgctgtctgt
720
gaccaggcct ggccggcaca ccagggtcgcc ggc
753

```

<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210          215

```

<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

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ggatccgaaaa cggtgggagc ataaagcagc atggcgccacc tactgaagac ggtggtggct
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ggctgtttcat gtcttttct tagcaacttg gggctctcta aggtttctacc tgggaagaga
120
gactttgttac gaacgcttcg tactcaccag gcactgtggt gtaaatcccc ggtaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
cgagttgcat tgtctctgc ggggggtccag gccttggtca agcagggtt caatgttgct
300
gtggaatcag gcgcaggcga agct
324

```

<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

      1           5           10           15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20           25           30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35           40           45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50           55           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65           70           75           80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85           90           95
Glu Ala

```

```

<210> 2229
<211> 320
<212> DNA
<213> Homo sapiens

```

```

<400> 2229
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60
cccacagaga gggaacgggc gggggggagg gagagagaa gacagactca ggcagaaccc
120
tagctcagcc cttctctgcg tgccctggccc tgggaggatg ccateccccag tcccctcttc
180
tggggccctgc tctggggact cggcacagat ggatccagtg catctcagc cccctgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccacgcagg
300
cctcgggtccc gccaaagtgt
320

```

```

<210> 2230
<211> 94
<212> PRT
<213> Homo sapiens

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```

<400> 2230
Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
1           5           10           15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20           25           30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35           40           45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50           55           60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65           70           75           80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85           90

```

```

<210> 2231
<211> 671

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<212> DNA

<213> Homo sapiens

<400> 2231

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt
 60
 tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggtaggaga
 120
 aaagccagct tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtctgtcc
 180
 catttactgt cgggggtgaca ggggggttgg gggtcagagt agagacagga gaaggaagt
 240
 agcattttgt ggataccacc cactgtccag ggactgaacc ctatctggat ctctcgcagc
 300
 cctcccaatg gcactgtgaa gccagtgttg ttttacagat gaggaaaactg agatttgtgg
 360
 ctataacaga taaacagatg acctgaatg gggcaggctc tgtcatctgc catagataca
 420
 tgcatagaac aatgcaaaac agtcagtcce ctctgagtca gaccaggctg accatcaggg
 480
 acatgcagac actggcaggg ctggggttgt tcccacatcg tgatagcctg gtgcccccat
 540
 ggccctgat gccacgggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
 600
 ttttctctca ccagcttttct ttttctatt ctttcttaga cacctgagct gcgggtgatca
 660
 cagctcttaa g
 671

<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

Met	Glu	Lys	Ser	Pro	Val	Gln	Cys	Pro	Thr	Gly	Lys	Cys	Phe	Pro	Leu
1				5					10					15	
Ile	Val	Glu	Leu	Ser	Cys	Pro	Phe	Thr	Val	Gly	Val	Thr	Gly	Gly	Val
		20						25				30			
Gly	Val	Arg	Val	Glu	Thr	Gly	Glu	Gly	Ser	Glu	His	Leu	Trp	Asp	Thr
		35				40						45			
His	His	Val	Pro	Gly	Thr	Glu	Pro	Tyr	Leu	Asp	Leu	Leu	Gln	Pro	Ser
		50				55				60					
Gln	Trp	His	Cys	Glu	Ala	Ser	Val	Val	Leu	Gln	Met	Arg	Lys	Leu	Arg
65				70					75					80	
Phe	Val	Ala	Ile	Thr	Asp	Lys	Gln	Met	Thr	Leu	Asn	Gly	Ala	Gly	His
			85						90				95		
Val	Ile	Cys	His	Arg	Tyr	Met	His	Arg	Thr	Met	Gln	Thr	Ser	Gln	Ser
			100					105				110			
Pro	Leu	Ser	Gln	Thr	Arg	Leu	Thr	Ile	Arg	Asp	Met	Gln	Thr	Leu	Ala
			115				120					125			
Gly	Leu	Gly	Leu	Phe	Pro	Ile	Gly	Asp	Ser	Leu	Val	Pro	Pro	Trp	Pro
		130				135					140				
Leu	Met	Pro	Thr	Ala	Val	Trp	Lys	Ala	Gly	Ser	Leu	Leu	Arg	Arg	Gln

145		150		155		160								
Gly	Asp	Ile	Phe	Ser	His	Gln	Leu	Ser	Phe	Tyr	Ser	Phe	Leu	Asp
			165				170						175	

Thr

<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

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 120
 agtgacacaa gtgaagctga aaaggaagg attatgggaa agatggaagc tgaccagag
 180
 ctatccaagt tctctacca gcttcataa accgagaagg aggatctgat ccgagaggaa
 240
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 300
 ctgcaccagg gtggagaggc actggctcca cggcagggtc tggacttgga ggacctgggt
 360
 tttaaccaag ggagccaact tatggccaat aaacgctgct agcttctcga tggactctcc
 420
 cgtcgcagc gtaagggcta tgaagaggc catgtgcctg ctttgaagcc caagcccttt
 480
 ggctcagaag aacaattgct ccggtggaa aagctgcca agtatgcca ggtggggtt
 540
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 600
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 660
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 720
 ttcaagatta tctacatagc tccatgcgc tccctggctc aggagatggt gggcagcttt
 780
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1260

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1320
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1380
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1560
gcttgggggtg tgaatctccc tgcacatata gtcatcatca aaggcaccga ggtgtacagt
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1680
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2100
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2160
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2280
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2400
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2460
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2640
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2820
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3120
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3300
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3360
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Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro	Pro Thr	
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Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		
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Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		
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1635          1640          1645
Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
1650          1655          1660
Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
1665          1670          1675          1680
Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
1685          1690          1695
Asp Ser Asp Ser Asp
1700

```

```

<210> 2235
<211> 586
<212> DNA
<213> Homo sapiens

```

```

<400> 2235
tctagaatga gtagaggac actctcacca gagtgagggtg aaggtgtata cagctggcac
60
tcagtgccttg cacattctcc actggcagaa tgactcccgga cgtggctcgg gctccccgga
120
agacaccctt cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
180
ctcattgttg cctctctctg tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
240
agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccggg cacttgacga
300
ggatgaagcc ggggaacgct gtagcgcct agagccaccc ccgcgagcac ttggacaaa
360
ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
420
tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
480
tgaactcgga ctccatgaag gggctgcttc gggetcatgg caccacccct gccatctcca
540
ccctggcccg ctctgccatc ttctctgtga cctacccttc acgcgt
586

```

```

<210> 2236
<211> 123
<212> PRT
<213> Homo sapiens

```

```

<400> 2236
Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
1      5      10      15
Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
20     25     30
Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
35     40     45
Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
50     55     60
Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
65     70     75     80
Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

```

	85		90		95
Gly	Pro	His	Leu	Leu	Gly
	100		105		110
Ser	Gln	Leu	Pro	Gly	Ser
	115		120		

<210> 2237
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 2237
 cctaggaagg cacacctgtg tccactgca gccagagga agcaccctct
 60
 tggggcgag gagtgctggc cagcttgggg atagtccttg gaagtggctg ggagcaetga
 120
 gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
 180
 gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
 240
 caccctgtgag aaggagtctt gttggggagca ggggtggggaa gcactgtggg agagggtgtcc
 300
 ttggctcggg tagcaggagc cttgatgtat cttgaagcca gggggccgac tgaggcgctt
 360
 gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
 420
 t
 421

<210> 2238
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 2238
 Met Glu Ala Phe Arg Gln Ala Pro Gln Ser Ala Pro Trp Leu Gln Asp
 1 5 10 15
 Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys
 20 25 30
 Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Thr Gly Gly Leu Ala
 35 40 45
 Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala
 50 55 60
 Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
 65 70 75 80
 Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
 85 90 95
 Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala
 100 105 110
 Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser
 115 120

<210> 2239
 <211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct
 60
 agccattcca ggctggggcc catggtcacc ccacacaata aggcctaagag tccaggtgtc
 120
 aggcagccagc gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctccaggacct
 240
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc tagggcgaca
 300
 gtcagtggtta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc
 360
 atcagtggtt cagttagttc tgcaagacct ttgggcagct ctctggccc tggcgggct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc gggggggtct
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggaaggac tgcagtaat
 540
 tcagtcaccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcagg
 600
 cccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

Ala Ser Arg Thr Gln Lys Ser Ala Val Glu His Lys Ala Lys Lys Ser
 1 5 10 15
 Leu Ser His Pro Ser His Ser Arg Pro Gly Pro Met Val Thr Pro His
 20 25 30
 Asn Lys Ala Lys Ser Pro Gly Val Arg Gln Pro Gly Ser Ser Ser Ser
 35 40 45
 Ser Ala Pro Gly Gln Pro Ser Thr Gly Val Ala Arg Pro Thr Val Ser
 50 55 60
 Ser Gly Pro Val Pro Arg Gln Asn Gly Ser Ser Ser Ser Gly Pro
 65 70 75 80
 Glu Arg Ser Ile Ser Gly Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro
 85 90 95
 Ser Arg Arg Thr Val Ser Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser
 100 105 110
 Ser Ser Gly Gly Pro Gly Arg Pro Ile Ser Gly Ser Val Ser Ser Ala
 115 120 125
 Arg Pro Leu Gly Ser Ser Arg Gly Pro Gly Arg Pro Val Ser Ser Pro
 130 135 140
 His Glu Leu Arg Arg Pro Val Ser Gly Leu Gly Pro Pro Gly Arg Ser
 145 150 155 160
 Val Ser Gly Pro Gly Arg Ser Ile Ser Gly Pro Ile Pro Ala Gly Arg


```

      100              105              110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
  115              120              125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
  130              135              140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
  145              150              155              160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165              170              175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180              185              190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195              200              205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210              215

```

<210> 2243

<211> 384

<212> DNA

<213> Homo sapiens

<400> 2243

```

gaattcagca tttaaatgtc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaacacagtgt tatcattcct taaaagagaa ggaataataa
180
tccttaaata atgtggactg gaacacagaa atccaaggct ggccgcaagg gtcctggctg
240
ggatggcatc ogggggagctg ctgctggggga cgtgcttgcc gccacaggtc aggggagccg
300
ggttctgect cctccttgcc cactctcttt gcgcctccc tgtgctgccc tgtcttgttt
360
tacctcccat cctgggcccct tgga
384

```

<210> 2244

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2244

```

Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
  1              5              10              15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20              25              30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35              40              45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50              55              60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
      65              70              75              80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

```

      85              90              95
Asp Ser Tyr  Gln Glu Met Asn Pro Gln Ser  Phe Ser
      100              105

<210> 2245
<211> 632
<212> DNA
<213> Homo sapiens

<400> 2245
acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct
60
tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgtctatt
120
gaggcccaca agcattttcac gtggcgctcat ggcgaggtcg acgcggtggg catggtgttt
180
gcggccgaac tgtcgaccg gtacctggga ctgtccgatg aggtcgttgc gcgcacccgc
240
actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
300
cgcaagacga tgaacttgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
360
ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga cctgaecgag
420
gccgctttag ccgagtgtct cgaaccgggt tccgcacggg aaaaacgttc ggaatatgaac
480
atgtggctgc gggtcagtcg gcattcagge ctcgtgacg ccgtcgaccc caagtatgtt
540
gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccga
600
cttaagtcca gtatcgacgg catgaatcgg ga
632

<210> 2246
<211> 153
<212> PRT
<213> Homo sapiens

<400> 2246
Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
1      5      10      15
Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
20     25     30
Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
35     40     45
Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
50     55     60
Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
65     70     75     80
Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
85     90     95
Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
100    105    110
Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

```

```

          115              120              125
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
   130              135              140
Glu Cys Tyr Asp Arg Cys Ser Ala Arg
145              150

```

<210> 2247
 <211> 324
 <212> DNA
 <213> Homo sapiens

```

<400> 2247
gggcgttcgc ctccagggtt ctecccgaca ctggatgcc aacctccag gggcagaagg
60
gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
120
ctctttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctggggc
180
ccccaccgc tgacccaccc gatctcagct ctgcctttcc cgctctctg ctgggttgca
240
taagccagcg attccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
300
tgtgccgtgt gagccatccc cctg
324

```

<210> 2248
 <211> 105
 <212> FRT
 <213> Homo sapiens

```

<400> 2248
Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
 1           5           10           15
Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
 20           25           30
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
 35           40           45
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
 50           55           60
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
 65           70           75           80
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
 85           90           95
Val Gly Glu Asn Pro Gly Gly Glu Arg
100           105

```

<210> 2249
 <211> 394
 <212> DNA
 <213> Homo sapiens

```

<400> 2249
gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
60

```

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggtttc ccattccac
 120
 ggtggaaacc gcgccagtg aattgaaac cgcttcctta aggcgaaatg ggccttaaa
 180
 aggcaaggtc aaccgccgc cagtgatg gaattgcaa gaattcgggt tagcaccctc
 240
 ccggcttttc tccgcaccg gtgcaggggt ggctgcgtg ggcctgggag gaactgggag
 300
 ctgggggctc atgtctgta taaaggggct gcaggggcgc tgtctcccc cagaagatg
 360
 gccacatggg gacagccctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1			5					10					15		
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
		20					25				30				
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35				40					45				
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55				60					
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
	65			70				75						80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
			85					90					95		
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
			100												

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtcggttc agttgttgca
 60
 gtggaatagt cagggttaaat ttaatgtgac cgtttatcgc aatctgccga ccaatgcga
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgtga ggggttgacc aagcgaagcg cggtaggttt tctgcttagg
 240
 agttaaataca tgtttcagac ttttatttct cgccataatt caaacttttt tctgtataag
 300
 ctggttttca cttctgttac tccagcttct tcggcacctg ttttacagac acctaagct
 360
 acatcgtaaa cggttatatt tgatagtttg acgggttaag ctggttaagg tgggttttct
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt ttgacctgtt tggttcgctt tgaagtcttc
 540
 tcggttccga ctaccctccc gactgcctat gatgtttatc ctttggtatg tcgccatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttctctg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20				25						30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
		35					40				45				
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55					60					
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65				70					75					80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85					90					95		
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100				105						110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr	
		115					120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccacgcc gctgggtgoc attattcgcg
 60
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgattt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgcctcacgc aatacctggg ccaactggaa gatatcgctt
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2254

```

Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1             5             10             15
Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20             25             30
Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35             40             45
Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50             55             60
Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65             70             75             80
Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85             90             95
Leu Thr Ala Leu
100

```

<210> 2255

<211> 357

<212> DNA

<213> Homo sapiens

<400> 2255

```

nngctagcac atgagaagtg tgaagtttat actttgcttg gccgatcacg ccgttttcca
60
aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
120
cctgtacagg gcagtgacgc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
180
actcgtctta aggagcttgg ttggacgcta ctcttcgagg tgcattatga agtgatactg
240
gaagggcctt cagagctctg ggagtnggcc aagtcctatg ttgttgagtg catgtctaag
300
cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca
357

```

<210> 2256

<211> 119

<212> PRT

<213> Homo sapiens

<400> 2256

```

Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1             5             10             15
Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20             25             30
Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35             40             45
Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50             55             60
Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

```

65              70              75              80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
85              90              95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
100            105            110
Ala Val Asp Ala Lys Cys Ala
115

<210> 2257
<211> 626
<212> DNA
<213> Homo sapiens

<400> 2257
nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcataaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agaggttgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttcttaggaa ggaaaaatgaa
360
gagcatgaca ggcctgcaga taaaacagct aatgaaaaa acaaggtcna aaaccaataa
420
tatectgagg ctgacttttc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

<210> 2258
<211> 187
<212> PRT
<213> Homo sapiens

<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1              5              10              15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
20              25              30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
35              40              45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
50              55              60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65              70              75              80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

```

      85              90              95
Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Gly Leu Asn Gln
      100              105              110
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
      115              120              125
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
      130              135              140
Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
      145              150              155              160
Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
      165              170              175
Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
      180              185

```

<210> 2259

<211> 425

<212> DNA

<213> Homo sapiens

<400> 2259

```

acgcgtcaca atgataaagc cattatatcc atcaagaggt aaatcattct tgaatttttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acgggtcatct acgactgtaa cagcacagcc aataaacaat agcaaatcag taatagctcg
180
gctaacaatga cctgcacctg atacgagaaac tgacggatca ttttctacag gttgtacgaa
240
acaactccatt tcgacctacca tgcatagaga attcagcttt gctttatcta cagtaaatcc
300
ttcaatagga gttccgtata gaacctctcc atcttcagca taaatagtct tatcccttgg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

```

<210> 2260

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2260

```

Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
1      5      10      15
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Asp Gly
20      25      30
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
35      40      45
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
50      55      60
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
65      70      75      80
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr

```



```

      85              90              95
Val Val Asp Asp Arg Pro Glu Tyr Val Val Pro Glu Phe Phe Asp Glu
      100              105              110
Arg Val Thr Arg Lys Cys Leu Pro Leu Glu Asn Phe Lys Asn Asp Leu
      115              120              125
Pro Leu Asp Glu Tyr Asn Gly Phe Ile Ile Val Thr Arg
      130              135              140

<210> 2261
<211> 660
<212> DNA
<213> Homo sapiens

<400> 2261
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ttgagcccaa gcgcagggtc gatgtgtccg gcgaccgcgc gcgttgcggt ggggcatag
120
tgctcggtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgcgggc
180
agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtogaatgtg actattcccg
240
acgatgcogg gaggtctctc gacaagcttc actgaacggt gttcaattgg tcccaacggc
300
tgcccatgtg ggcagcgcct ctatctctgc atgggaagga acccgatgtc gtcacgcaat
360
ggtttccagg ccaccgacct ggctcttacc gcggtctttg cagccctcat tgctgtgcta
420
gcgcgtatcc gcgcgatgtt catgggtggg gcggtccctt ttgcccttca gatggttgcc
480
gtcatgtctg gcgcgatggt gctgggaagt atccgtggcg gatgcgcggt aggcttgat
540
atccttgctg gcgcgtggg gctgcccgtc ttcagcggtg ggtctagcgg gattggcgtc
600
ctggtggggt ccactgggtg gtatctatgg ggatggctga tcggcgcttt cgtggcgggg
660

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<210> 2262
<211> 139
<212> PRT
<213> Homo sapiens

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<400> 2262
Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
1      5      10      15
Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
20     25     30
Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
35     40     45
Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
50     55     60
Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
65     70     75     80
Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

```

```

      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
      130              135

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<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

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nacgcgttcc cggtcgaccg aggcaaaggc aaaagtaagc aggggtgccg tagtccccgt
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tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttaccg
120
gagggcaccg ggtctcgac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttcc gggtatcccg attgctttag taggagcatg ggcggctatg
240
cggtcggagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttcccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
360
gtcattgagt tgcacgacca aaccgcccgc gectacggca tgccaacct tgacaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcatc caccaaccac
480
tcgacgtgca c
491

```

<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

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Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala
1      5      10
Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
      20      25      30
Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
      35      40      45
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
      50      55      60
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
      65      70      75      80
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
      85      90      95
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
      100      105      110
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

```

```

          115              120              125
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
   130              135              140
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
   145              150              155              160
Ser Thr Cys

```

<210> 2265

<211> 328

<212> DNA

<213> Homo sapiens

<400> 2265

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ccatgggaat aggcccaacac ggatggatct actgtataac ttgacctgcca tcaggaaaga
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gtcaacacgag cagacacatg ctggcagaaa cctgctgga gttgccctg agcattgatg
120
cataccacc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggtg cggaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
tttagcacgt gactgggacc actggaca
328

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<210> 2266

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2266

```

Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
 1              5              10              15
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
   20              25              30
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
   35              40              45
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
   50              55              60
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
   65              70              75              80
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
   85              90              95
Thr Pro Asn Leu
   100

```

<210> 2267

<211> 370

<212> DNA

<213> Homo sapiens

<400> 2267

agatctatgc aggtagcgct ggtctccggg gggtaagtgc tccactccct gtcagatggc
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 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacaggtcac
 120
 cgaggggacc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgaac ggagtggcca atctgtacag ggacaggctc aaggccacag caatcaggg
 240
 gacacagatg gtgaagcagg catgtcctaa agcctccctt cttaaccttg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtatgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5					10					15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
			35					40				45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
					85				90						

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

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 tgtaaggctg ccaccgagca cggtacgagc atccgaatcg gcgtgaatgc tgggtctctc
 120
 gacaaaogtc tgcttgacaa atacggagcc cggaccgccc aggcctatggt ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctctgtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgcccgaat atcgatttat
 300
 ccccttcatt tggggcgttac tgaggctggt ccggccttcc aaggcaccat caagtccggc
 360
 gtggccttcg ggcattctct tgccgagggg atcgccgata ccatacgctg ctctctgtcg
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctctctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln
 1 5 10 15
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Glu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatgggtcg acgaaagcct ggaacagttc gccagttgc tcaaaacccg cacctcgga
 120
 gaaggcatgg cgccgttgac ctccgacgcg gtggcgcggt tggccactta cagcgacgg
 180
 ctggcgggacc accaaggggc tgtgtccgcg cgcattggcg acttgttcca actggtcagc
 240
 gagggcgact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
 300
 cgggcgctca aggccaaagg caccgctacc gggcggtgat cggcgcggat tctcgacgac
 360
 atgctcgctg ggggtcactc gatcgacacc gccgggtgcg ccgtgggcaa atgcaacggg
 420

ctgacggtgc tggaaagtcgg cgattcggcg ttccggcgtgc cggcgcggtat ttccgccacg
 480
 gtgtaccgcg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagcgg
 540
 atccactcca agggcgtgat gatccttacc ggt
 573

<210> 2272
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 2272
 Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe
 1 5 10 15
 Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln
 20 25 30
 Leu Leu Lys Thr Arg Thr Ser Glu Glu Gly Met Ala Pro Leu Thr Ser
 35 40 45
 Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His
 50 55 60
 Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser
 65 70 75 80
 Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala
 85 90 95
 Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg
 100 105 110
 Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile
 115 120 125
 Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu
 130 135 140
 Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr
 145 150 155 160
 Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn
 165 170 175
 Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly
 180 185 190

<210> 2273
 <211> 4355
 <212> DNA
 <213> Homo sapiens

<400> 2273
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 aggggaggcc tctctctgga acgcctaccc aactccatcg cctcccgctt ccgcctgaca
 120
 gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc
 180
 ctgcaggaat tggagaagac cacaataac agcacgtcga ggcattcgaa aggcgtgcac
 240
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 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tcoggagggt gctgcggact
360
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420
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480
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660
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720
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780
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 4200
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 4320
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 4355

<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

Ser Phe Gln His Ala Ser Gly Phe Leu Gly Glu His Ser Pro Gly Gly
 1 5 10 15
 Gln Arg Ser Cys Arg Gly Gly Leu Ser Leu Glu Arg Leu Pro Asn Ser
 20 25 30
 Ile Ala Ser Arg Phe Arg Leu Thr Glu Arg Glu Glu Val Ile Thr
 35 40 45
 Cys Phe Glu Arg Ala Ser Trp Ile Ala Gln Val Phe Leu Gln Glu Leu
 50 55 60
 Glu Lys Thr Thr Asn Asn Ser Thr Ser Arg His Leu Lys Gly Cys His
 65 70 75 80
 Pro Leu Asp Tyr Glu Leu Thr Tyr Phe Leu Glu Ala Ala Leu Gln Ser
 85 90 95
 Ala Tyr Val Lys Asn Leu Lys Lys Gly Asn Ile Val Lys Gly Met Arg
 100 105 110
 Glu Leu Arg Glu Val Leu Arg Thr Val Glu Thr Lys Ala Thr Gln Asn
 115 120 125
 Phe Lys Val Met Ala Ala Lys His Leu Ala Gly Val Leu Leu His Ser
 130 135 140
 Leu Ser Gly Val Leu Leu Glu Pro Pro Val Pro Pro Ser Ala

145

150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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 cctcgcatct gtcatactt atgaaaccca aacagagaga tctagagcac aaacaatata
 120
 aaggagaaca ggagacctca aaaggaagaa ccaggctgtg ccccaacctt ttttccaaac
 180
 caaagtctctg gcttcactac acccactgct atgacacctc ctgttctaac cacagcggaa
 240
 acttcagtca agcccagtggt ctctgcatte actcattccc caccagaaaa cacaactggg
 300
 atttcaagca caatcagttt tcattcaaga actcttaate tgacagatgt gattgaagaa
 360
 ctagcccaag caagtactca gactttgaag agcacaattg cttctgaaac aactttgttc
 420
 agcaaatcac accagagtac cacaactagg aaagcaatca ttagacactc aaccatacca
 480
 ccattcttga gcagcagtgct tactctaata ccagttccca tctccctccc ctttactcag
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 agagcagtta ctgacaacgt ggcgaactccc atttccgggc ttatgacaaa tacagtggtc
 600
 aagctgctg
 608

<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

Ser Thr Asn Asn Thr Lys Glu Asn Arg Arg Pro Gln Lys Glu Glu Pro
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 Gly Cys Ala Pro Thr Phe Phe Pro Asn Gln Ser Ser Gly Phe Thr Thr
 20 25 30
 Pro Thr Ala Met Thr Pro Pro Val Leu Thr Thr Ala Glu Thr Ser Val
 35 40 45
 Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr
 50 55 60
 Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr
 65 70 75 80
 Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser
 85 90 95
 Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr
 100 105 110
 Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu
 115 120 125
 Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

130	135	140
Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met		
145	150	155
Thr Asn Thr Val Val Lys Leu		160
	165	

<210> 2277

<211> 640

<212> DNA

<213> Homo sapiens

<400> 2277

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 120
 gacagggaca ctgagggatg aaagccccca cgctctggcc tgcctgctc agtcaggggc
 180
 gctggcatgg gccgttcttc cctggggact gcacagcctg gaccnccac caagtctgt
 240
 tgcaccacct ggctcagctc tctccagcc gcctgcctgc ctccctccct cctttcccca
 300
 taccacagtc tgccatctcc cagctgcaag gtccatgccca cccacagga agagcctcag
 360
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 420
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 480
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<210> 2278

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2278

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Gly	Arg	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro	Gly	Pro	Xaa	Thr	Lys	Ser
			20				25							30	
Cys	Cys	Pro	Pro	Trp	Leu	Ser	Ser	Pro	Pro	Ala	Ala	Cys	Leu	Pro	Ser
			35				40					45			
Ser	Leu	Leu	Ser	Pro	Tyr	Pro	Val	Leu	Pro	Ser	Pro	Ser	Cys	Lys	Val
			50			55				60					
His	Ala	Thr	Pro	Gln	Glu	Glu	Pro	Gln	Arg	Leu	Ser	Ser	Asp	Pro	Thr
			65			70			75					80	
Leu	Ser	Ala	Pro	Thr	Leu	Pro	Pro	His	Gln	Ile	Leu	Ser	Thr	Pro	
			85					90						95	

<210> 2279
 <211> 331
 <212> DNA
 <213> Homo sapiens

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 180
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<210> 2280
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2280
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 20 25 30
 Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser
 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
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 Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
 65 70 75 80
 Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile
 85 90

<210> 2281
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 2281
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 120
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 180
 gataatgaag ccaggctctg aatgggatgg ctctacccca agtgaggact cccgaggtag
 240
 ctttgtgcca gatattttac atggcaactt tcaagagggt gggcagctgg cctctgcgc
 300

gcctgacttg tggatagatg ctaagaagcc cttcagtttg aaagcagatg gtgagaatcc
 360
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 409

<210> 2282

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2282

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Pro	Thr	Gln	Leu	Ile	Met	Lys	Pro	Gly	Ser	Glu	Trp	Asp	Gly	Ser	Thr
		20					25					30			
Pro	Ser	Glu	Asp	Ser	Arg	Gly	Thr	Phe	Val	Pro	Asp	Ile	Leu	His	Gly
		35				40					45				
Asn	Phe	Gln	Glu	Gly	Gly	Gln	Leu	Ala	Ser	Ala	Ala	Pro	Asp	Leu	Trp
		50			55					60					
Ile	Asp	Ala	Lys	Lys	Pro	Phe	Ser	Leu	Lys	Ala	Asp	Gly	Glu	Asn	Pro
65					70				75					80	
Asp	Ile	Leu	Thr	His	Cys	Glu	His	Asp	Tyr	Gly	Glu	Thr	Thr	Thr	Arg
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<210> 2283

<211> 404

<212> DNA

<213> Homo sapiens

<400> 2283

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 120
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 180
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 300
 cgacttcag ctaaagcgca ggcgtcccat gccacttcct ctccgaagat gcgtaaagtt
 360
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 404

<210> 2284

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2284

Met	Asp	Leu	Arg	Ser	Gln	Arg	Arg	Gln	Trp	Thr	Arg	Arg	Ala	Cys	Glu
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His	Leu	Leu	Val	Val	Phe	Phe	Leu	Val	Gly	Ala	Val	Pro	Thr	Ile	Ser

	20		25		30
Ser	Lys	Phe	Arg	Arg	Lys
	35		40		45
Leu	Leu	Cys	His	Leu	Gly
	50		55		60
Val	Leu	Arg	Asn	Arg	Leu
	65		70		75
Gln	Ala	Phe	Gly	Arg	Ala
		85		90	
Ser	His	Ala	Thr	Ser	Ser
	100		105		110
Gln	Gly	Ala	Val	Glu	Arg
	115		120		

<210> 2285

<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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 240
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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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 35 40 45
 Ile Val His Pro Val Arg Val Asp Ala Gly Gly Ser Phe Leu Ser Tyr
 50 55 60
 Glu Leu Trp Pro Arg Ala Leu Arg Lys Arg Asp Val Ser Val Arg Arg
 65 70 75 80
 Asp Ala Pro Ala Phe Tyr Glu Leu Gln Tyr Arg Gly Arg Glu Leu Arg
 85 90 95
 Phe Asn Leu Thr Ala Asn Gln His Leu Leu Ala Pro Gly Phe Val Ser
 100 105 110
 Glu Thr Arg Arg Arg Gly Gly Leu Gly Arg Ala His Ile Arg Ala His
 115 120 125
 Thr Pro Ala Cys His Leu Leu Gly Glu Val Gln Asp Pro Glu Leu Glu
 130 135 140
 Gly Gly Leu Ala Ala Ile Ser Ala Cys Asp Gly Leu Lys Gly Val Phe
 145 150 155 160
 Gln Leu Ser Asn Glu Asp Tyr Phe Ile Glu Pro Leu Asp Ser Ala Pro
 165 170 175
 Ala Arg Pro Gly His Ala Gln Pro His Val Val Tyr Lys Arg Gln Ala
 180 185 190
 Pro Glu Arg Leu Ala Gln Arg Gly Asp Ser Ser Ala Pro Ser Thr Cys

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Ser Ala Ser Val Pro Arg Ala Gly Val Ser Thr Gly Ala Leu Gly Ala		
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Ala Ala Ala Val Ala Ala Ala Thr Ala Arg Arg Leu His Gln Arg Ser		
225	230	235
Val Ser Lys Glu Lys Trp Val Glu Thr Leu Val Val Ala Asp Ala Lys		
	245	250
Met Val Glu Tyr His Gly Gln Pro Gln Val Glu Ser Tyr Val Leu Thr		
	260	265
Ile Met Asn Met Val Ala Gly Leu Phe His Asp Pro Ser Ile Gly Asn		
	275	280
Pro Ile His Ile Thr Ile Val Arg Leu Val Leu Leu Glu Asp Glu Glu		
	290	295
Glu Asp Leu Lys Ile Thr His His Ala Asp Asn Thr Leu Lys Ser Phe		
	310	315
Cys Lys Trp Gln Lys Ser Ile Asn Met Lys Gly Asp Ala His Pro Leu		
	325	330
His His Asp Thr Ala Ile Leu Leu Thr Arg Lys Asp Leu Cys Ala Ala		
	340	345
Met Asn Arg Pro Cys Glu Thr Leu Gly Leu Ser His Val Ala Gly Met		
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Cys Gln Pro His Arg Ser Cys Ser Ile Asn Glu Asp Thr Gly Leu Pro		
	370	375
Leu Ala Phe Thr Val Ala His Glu Leu Gly His Ser Phe Gly Ile Gln		
	385	390
His Asp Gly Ser Gly Asn Asp Cys Glu Pro Val Gly Lys Arg Pro Phe		
	405	410
Ile Met Ser Pro Gln Leu Leu Tyr Asp Ala Ala Pro Leu Thr Trp Ser		
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Arg Cys Ser Arg Gln Tyr Ile Thr Arg Phe Leu Asp Arg Gly Trp Gly		
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Leu Cys Leu Asp Asp Pro Pro Ala Lys Asp Ile Ile Asp Phe Pro Ser		
	450	455
Val Pro Pro Gly Val Leu Tyr Asp Val Ser His Gln Cys Arg Leu Gln		
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Tyr Gly Ala Tyr Ser Ala Phe Cys Glu Asp Met Asp Asn Val Cys His		
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Thr Leu Trp Cys Ser Val Gly Thr Thr Cys His Ser Lys Leu Asp Ala		
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Ala Val Asp Gly Thr Arg Cys Gly Glu Asn Lys Trp Cys Leu Ser Gly		
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Glu Cys Val Pro Val Gly Phe Arg Pro Glu Ala Val Asp Gly Gly Trp		
	530	535
Ser Gly Trp Ser Ala Trp Ser Ile Cys Ser Arg Ser Cys Gly Met Gly		
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Val Gln Ser Ala Glu Arg Gln Cys Thr Gln Pro Thr Pro Lys Tyr Lys		
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Gly Arg Tyr Cys Val Gly Glu Arg Lys Arg Phe Arg Leu Cys Asn Leu		
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Gln Ala Cys Pro Ala Gly Arg Pro Ser Phe Arg His Val Gln Cys Ser		
	595	600
His Phe Asp Ala Met Leu Tyr Lys Gly Gln Leu His Thr Trp Val Pro		
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Val Val Asn Asp Val Asn Pro Cys Glu Leu His Cys Arg Pro Ala Asn		

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Glu	Tyr	Phe	Ala	Lys	Lys	Leu	Arg	Asp	Ala	Val	Val	Asp	Gly	Thr	Pro
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Cys	Tyr	Gln	Val	Arg	Ala	Ser	Arg	Asp	Leu	Cys	Ile	Asn	Gly	Ile	Cys
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Lys	Asn	Val	Gly	Cys	Asp	Phe	Glu	Ile	Asp	Ser	Gly	Ala	Met	Glu	Asp
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Arg	Cys	Gly	Val	Cys	His	Gly	Asn	Gly	Ser	Thr	Cys	His	Thr	Val	Ser
			690			695					700				
Gly	Thr	Phe	Xaa	Arg	Arg	Pro	Arg	Val	Xaa	Gly	Tyr	Val	Asp	Val	Gly
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Gly	Thr	Thr	Phe	Thr	Tyr	Ala	Arg	Arg	Gly	Asn	Trp	Glu	Asn	Leu	Thr
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			820					825					830		
Glu	Pro	Gly	Ser	Glu	Pro	Gly	Pro	Pro	Ala	Ala	Ala	Ser	Thr	Ser	Val
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Ser	Pro	Ser	Leu	Lys	Trp	Pro	Asn	Leu	Val	Ala	Ala	Val	His	Arg	Gly
			850			855					860				
Gly	Trp	Gly	Gln	Ala	Pro	Leu	Gly	Leu	Gly	Gly	Trp	Arg	Arg	His	Leu
865				870					875					880	
Val	Leu	Met	Gly	Pro	Arg	Leu	Pro	Thr	Gln	Leu	Leu	Phe	Gln	Glu	Ser
			885						890					895	
Asn	Pro	Gly	Val	His	Tyr	Glu	Tyr	Thr	Ile	His	Arg	Gly	Ala	Gly	Gly
			900					905					910		
His	Asp	Glu	Val	Pro	Pro	Pro	Val	Phe	Ser	Trp	His	Tyr	Gly	Pro	Trp
			915				920					925			
Thr	Lys	Cys	Thr	Val	Thr	Cys	Gly	Arg	Gly	Val	Gln	Arg	Gln	Asn	Val
			930			935					940				
Tyr	Cys	Leu	Glu	Arg	Gln	Ala	Gly	Pro	Val	Asp	Glu	Glu	His	Cys	Asp
945				950						955				960	
Pro	Leu	Gly	Arg	Pro	Asp	Asp	Gln	Gln	Arg	Lys	Cys	Ser	Glu	Gln	Pro
			965						970					975	
Cys	Pro	Ala	Arg	Trp	Trp	Ala	Gly	Glu	Trp	Gln	Leu	Cys	Ser	Ser	Ser
			980					985					990		
Cys	Gly	Pro	Gly	Gly	Leu	Ser									

1060 1065 1070
 Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser
 1075 1080 1085
 Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser
 1090 1095 1100
 Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile
 1105 1110 1115 1120
 Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro
 1125 1130 1135
 Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu
 1140 1145 1150
 Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile
 1155 1160 1165
 Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu
 1170 1175 1180
 Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro His Ser His Pro
 1185 1190 1195 1200
 Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala
 1205 1210 1215
 Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro
 1220 1225 1230
 Ser Gln Ala Gly Arg Ser Pro Pro Pro Pro Ser Glu Gln Thr Pro Gly
 1235 1240 1245
 Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala
 1250 1255 1260
 Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp
 1265 1270 1275 1280
 Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val
 1285 1290 1295
 Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr
 1300 1305 1310
 Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro
 1315 1320 1325
 His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val
 1330 1335 1340
 Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr
 1345 1350 1355 1360
 Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro
 1365 1370 1375
 Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro
 1380 1385 1390
 Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu
 1395 1400 1405
 Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp
 1410 1415 1420
 Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr
 1425 1430 1435 1440
 Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly
 1445 1450 1455
 Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu
 1460 1465 1470
 Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu
 1475 1480 1485
 Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp

1490 1495 1500
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu
 1505 1510 1515 1520
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
 1525 1530 1535
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro
 1540 1545 1550
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn
 1555 1560 1565
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Ser Ser Val Arg Asp
 1570 1575 1580
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His
 1585 1590 1595 1600
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
 1605 1610 1615
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
 1620 1625 1630
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro
 1635 1640 1645
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn
 1650 1655 1660
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser
 1665 1670 1675 1680
 Ala Pro Cys Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn
 1685 1690 1695
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu
 1700 1705 1710
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro
 1715 1720 1725
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
 1730 1735 1740
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
 1745 1750 1755 1760
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg
 1765 1770 1775
 Gly His Gln Arg Val Ala Arg Arg
 1780

<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

tgacacaggt tattttctctt tgggttaaata tcttacaagt ctttttttaa tcttcacttc
 60
 tggcctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg
 120
 ttgaggacat ttgtacagag tcaggtaact ggagggaactg gactacaacc ctgctcagt
 180
 cagccagtgt gactgagcgc ctctgagag ccagggtgat tctgccctca aggatccatg
 240
 ctctgggcaa gaaacccacc catcagcagg tggcttctgc tgagccacaa caggcacaca
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc
 360
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga
 420
 gcagcaggac aaaagcatag aggtagcact gccagtgcc agttccaaaa taagaggctg
 480
 actgctacag ggtccatata gaaaaataat gggaaataca ttggacagg aggtggggtc
 540
 tgaacaaag gactttaatt ccaggttaag gaatctggat gttaaaacaa cattagctgc
 600
 catttctaca gtgctacttc ccaggctctg tgcctttctg ggagccttag aggtttgtga
 660
 gctggaagga gatattagga acaaacgat gcatgaggat agctcaggta aaggttatig
 720
 ataagtaaga atgcctggca ccaaacgct
 750

<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

Met	Ala	Ala	Asn	Val	Val	Leu	Thr	Ser	Arg	Phe	Leu	Asn	Leu	Glu	Leu
1			5						10			15			
Lys	Ser	Phe	Val	Thr	Asp	Pro	Thr	Ser	Cys	Pro	Asn	Val	Phe	Pro	Ile
			20						25			30			
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Ile	Leu	Glu	Leu	
			35				40				45				
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Ser	Pro	Ala	
			50			55				60					
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70				75					80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
			115					120					125		
Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
			130				135					140			

<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

caggacgcgg cctcgccggg gcccgggccg aacggctgcg gacacctggg cgccgaggag
 60
 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcgga gctggagaag
 120
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta
 240
 tcagggaacac tttcacttgt ttgacacag ggctgtaaaa gaataanaag gggatactgg
 300
 ttcaaaaatt ggcctccgac cacaagaca tccacagcag tgtttctcgg gttggaaaag
 360
 ccattgatga ggattcactt t
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1			5				10					15			
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20				25						30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
		35				40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
		50				55					60				
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65				70						75				80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90						95	

Arg Ile His Phe
 100

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcattgctcta ccgcaaaagtc gggccccac cgattaaaaa tgccccgggtc gaggacagcc
 60
 ttccggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc
 120
 aagtggtcga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc
 180
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
 240
 cgatgctcgt tgacggtaag actcggcgac ccagcaacgt cggcgggtgt cgtgcctca
 300
 tcgggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaaagaa ggctgcggaa
 360
 gcctcgcgta attcttgggg accgaggctc tcggcgcgcc ggtctgaccc caccgccttg
 420
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga caggtattcc
 480
 tcctgccagt cccgcgctgc ccgaggcaag ctcatccccc agttgagctg ccaataccgc
 540

cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2292

Met	Ser	Leu	Pro	Arg	Ala	Ala	Arg	Asp	Trp	Gln	Glu	Glu	Tyr	Leu	Ser
1				5				10						15	
Asn	Pro	Ser	Gly	Glu	Ala	His	Val	Arg	Ser	Val	Leu	Asn	Ala	Lys	Phe
			20					25					30		
Lys	Ala	Val	Gly	Ser	Asp	Arg	Arg	Ala	Glu	Asp	Leu	Gly	Pro	Gln	Glu
			35				40					45			
Leu	Arg	Glu	Ala	Ser	Ala	Ala	Phe	Phe	Ala	Gly	Gly	His	Asp	Val	Ile
			50			55					60				
Val	Ala	Arg	Arg	His	Tyr	Thr	Asp	Glu	Gly	Thr	Thr	Thr	Ala	Asp	Val
65				70					75					80	
Ala	Gly	Ser	Ala	Ser	Leu	Thr	Val	Asn	Glu	His	Arg	Ala	Phe	Met	Ala
			85					90					95		
Leu	Thr	Val	Asp	Ser	Met	Ala	Gln	Leu	His	Arg	His	Asn	Glu	His	Val
			100					105					110		
Arg	Tyr	Val	Val	Val	Phe	Gln	Asn	Trp	Leu	Lys	Pro	Ala	Gly	Ala	Ser
			115			120					125				
Ile	Asp	His	Leu	His	Lys	Gln	Val	Val	Ala	Ile	Asp				
			130			135					140				

<210> 2293

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2293

acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg
60
gtgaacactg tcgctaagaa ctgggtgaac cggctcaaca cgccggatat gaaacccact
120
gaggagatca agcggcagtt ccaaggtctg cattggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtctctcttc
240
gaggcgaatc cgcgcattaa gagcaacttt gattccgagg gcgctgttgt ggaatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgagggtg cttcggtatgc atgccttc
358

<210> 2294

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2294

Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

```

      1           5           10           15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20           25           30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35           40           45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50           55           60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65           70           75           80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85           90           95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100          105          110
Ala Cys Leu
      115

```

<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

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ggcaccgatc cgagtggttg tgccgggatt aggcgggatc tanaaacatt ctccgcccctt
60
ggggcgatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtagcg
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcgagcgccc tcaaacatta tcgcggttaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag caggggcgcg cacttctggc gtttggctgc
480
gaggcagtg tcatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

```

Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
      1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
      20           25           30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

          35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
   50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
          85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
          100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
          115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
          130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
          145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
          165          170          175
Asp Trp Leu Phe Thr Arg
          180

```

<210> 2297

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2297

```

gggaattccg ggcctctccc cccaagcccg ggtaattttt tgtattttta aaaaaaaaaagg
 60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac cccccccccc
 120
caccctccca aaggccgaaa agcaggggcca aaacccccgg gacccccccc gggggggggca
 180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgagggtct ctggttaata
 240
aatgttgaga tgtagggtta ggtgagatta aacagggtct ttttttcattg attttctcga
 300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
 360
gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
 414

```

<210> 2298

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2298

```

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
 1          5          10          15
Pro Pro Lys Thr Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
          20          25          30
Pro Lys Pro Pro Gly Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
          35          40          45
Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50 55 60

Val Glu Met
65

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
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 60
 ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctcgga ctctgaccca
 120
 acatgctgtg atgtgtgccg agggaggaaat tggtcagcta cacaacctgg atcttaccac
 180
 agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga
 240
 ggtgcaacca gggatgatga ttcagggccca tacaactatt cctcgttgct cgcctgtggg
 300
 cgcaagtctc ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
 360
 cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
 420
 acaacaaagt acacacttct gaattttgtg ccaagaattt tatttgaaca atttcacaga
 480
 gctgcccaatt tataatttct gttcctagtt gtccctgaact gggtaacctt ggtagaagcc
 540
 ttccaaaagg aaatcaccat gttgcctctg gtggtgggtc ttacaattat cgcaattaaa
 600
 gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttttaataact
 660
 aaagtttata gtaggaaaga gaaaaatac attgaccgat gctggaaaga cgttactgtt
 720
 ggggacttta ttcgcctctc ctgcaacagag gtcacccctg cagacatggt actactcttt
 780
 tccactgata cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
 840
 ttaaaacaga ggcaggtggt tcgggggatat gcagacacgg actctgaagt tgatcctgag
 900
 aagttttcca gtaggataga atgtgaaagc ccaacaatg acctcagcag attccgaggg
 960
 ttcttagaac attccaacaa agaacgc
 987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
 Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
 1 5 10 15
 Arg Gly Ala Thr Arg Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

```

                20                      25                      30
Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
   35                      40                      45
Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
   50                      55                      60
Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
   65                      70                      75                      80
Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
   85                      90                      95
Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
   100                      105                      110
Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
   115                      120                      125
Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
   130                      135                      140
Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
   145                      150                      155                      160
Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
   165                      170                      175
Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
   180                      185                      190
Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
   195                      200                      205
Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
   210                      215                      220
Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
   225                      230                      235                      240
Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
   245                      250                      255
Gly Phe Leu Glu His Ser Asn Lys Glu Arg
   260                      265

```

<210> 2301

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2301

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tatcccaaacg gcttcaaatt tgaatgccgat gagttctact tgaaatcgtc cgaggaaatg
60
nncgccacct ctcccgcgna ttccctgaa gcctgcgata acactatgga aatcgctgag
120
nncggttgcca cgttgaattc aacacaaaacg caanactaca tgccccgattt cccacccccg
180
gaggggggaga atgagggaatc ctggttgcgt aaagaagttg aacgcgggtt gcactaccga
240
ttccccgagg gcattcccgga tgacgtacgc aagcaggcag attatgaagt agggattatt
300
accagatagg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
360
aataacggaa ttcgagtggg ccccgggcgt
390

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<210> 2302

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2302

```

Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1           5           10           15
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
          20           25           30
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
          35           40           45
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
          50           55           60
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
65           70           75           80
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
          85           90           95
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
          100          105          110
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
          115          120          125
Gly Arg
130

```

<210> 2303

<211> 638

<212> DNA

<213> Homo sapiens

<400> 2303

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nnggatccag gctgcccctg tgtgtctcct tcagttcttc ttagctgcct gctgctgtct
60
gcacctgtgt ttggtacact gggcgaccga catagccgca aggetacat gagcttcggt
120
atcttctgtt ggtcaggagc tggcctctct agctcctca tctcccccg gtattcttgg
180
ctctctcttc tgtcccgagg catcgagggc actggctcgg ccagctactc caccatcgcg
240
cccacgtcc tggcgacact ctctgtgagg gaccagcgca ccgcgtgct ggctgtcttc
300
tacctcttta tccccgttgg aagtggctgt ggctacgtgc tggggctggc tgtgacgatg
360
ctgactggga actggcgctg ggcctccga gtcatgccct gcctggaggc cgtggccttg
420
atcctgctta tctctgttgt tccagaccca ccccggggag ctgccgagac acagggggag
480
ggggcgctgg gaggtctcag aagcagctgg tgtgaggagc tcagatacct ggggaaaaac
540
tgaggttttg tgtggctcag cctcggagtg accgccatgg cctttgtgac tggagccctg
600
gggttctggg cccccaagtt tctgctcgag gcacgcgt
638

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<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
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 60
 tcggaccagc acacttttgac cgtcgttggt gcctcgtgac atggggtaac gcgaacctcg
 120
 tcgtctctgt tcttgacctc ttcogtgcgc ccattgacaa cgatcgggca agttcaactgg
 180
 ccgcgaacgc tattggtgac gcagcactcg cagctgggtct cgaccgactc gtccacacca
 240
 cggcgtcggg gcgcgcagag ggcgatgagt tggctcgtct tactcgcagc gctgctgcgc
 300
 ccgcacgcga ttccatgacg acaacgtgga gttggcgcgc
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
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 60
 gccaaaggcac tgggtggggc tggcagtggt agcaagggct cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagectggat
 180
 gacagcagcc tggccctggg cgcagagggc aggaccttcg ggggattccc tgagagccct
 240
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttctctcc tgagccccca
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro


```

65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
          85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
          100          105          110
Gly Leu Pro Lys Thr Lys Glu Ala
          115          120

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<210> 2309

<211> 395

<212> DNA

<213> Homo sapiens

<400> 2309

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ggatccctac aaatggggcc ctgctctgag cacattccca tgagggtgc ctgccctgtg
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cactctctgc cctggggcgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttcag caggcacagg gattcctcat gggggaggca gageccaccc gtctgtcttc
180
ggtagcggcc tgagctgtgc acggcctccc ctgccctcct gtctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccctgg agtctcctcc cagaccagcc
300
gactccactc acactgtgcc tagcggactg tgtgggtgat gcagccggct cacttgagtg
360
tgttgtgtta tgcccacaac aggcttgccg tcacc
395

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<210> 2310

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2310

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Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
100          105

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<210> 2311

<211> 378

<212> DNA

<213> Homo sapiens

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<400> 2311
gtgcacgccc agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
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ggctttctcag tgatcaagggt cggcgatggc atcaatgatt gcgacgctct cgccgcggcg
120
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
180
gtcccttcacg gacgggtggg ggaagtcttc gcgatgatcg cccatcgaa gcgaaccatg
240
gccaacattc gacagaacat cgcgatcgcg atcggggctaa aggcgggtgt ccttgtaacg
300
accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
360
cttgtgacca tgaacgcg
378

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<210> 2312
<211> 126
<212> PRT
<213> Homo sapiens

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<400> 2312
Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu
1 5 10 15
Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn
20 25 30
Asp Cys Asp Ala Leu Ala Ala Asp Val Gly Ser Pro Met Gly Gly
35 40 45
Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly
50 55 60
Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met
65 70 75 80
Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val
85 90 95
Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile
100 105 110
Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala
115 120 125

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<210> 2313
<211> 669
<212> DNA
<213> Homo sapiens

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<400> 2313
ctagtggcat ggtctcgtg gtcttttagtg gagcataccg acacatcggt gactcaaacg
60
atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct caccatcgcg
120
ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcgggtac gacacggggg
180
ccgcttggat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
240

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gtcgacgccc cgtttacctc gtggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcgatcg cccgcattgg gttaccgggt
 420
 ctcaacgggtg aaacgagcca cgaattgtgg ggcgacgccc cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagacaa tgacctggcg cccagatgca
 540
 tttaatgagg gcccgaccca cggtagctgc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcattcgcta acccgcgga gctcgaaagg acaaggacgg gaaggcagga
 660
 ttccacgct
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1			5						10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
			20						25					30	
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
			35					40					45		
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
			50				55				60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
					85					90				95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
					100			105					110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
					115			120				125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
					130			135				140			
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
					145			150			155			160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
					165				170					175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
					180			185						190	
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
			195					200					205		

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315
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 acccaaggcc gaccaattcg catcgataag ggggtcgctt atcacacttc tgcgcgctg
 120
 cgggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggccttgacg attactgggc aacggctgat
 240
 gttgaggtcg aggggtgcccc gaccggtatt cagcaggctg tcagggtggaa cctttccag
 300
 attgctcagg catcagcccg tgcagatcaa ettgccatc cggcaagggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgagggtt atgtcatccc gatgttgacc
 420
 tacatcatc caagaatcgc tgagaatgcg ctgagattcc gggtaatac ctttcgcgaa
 480
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 540
 accggt
 546

<210> 2316
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 2316
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
 1 5 10 15
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
 20 25 30
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
 35 40 45
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
 50 55 60
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
 65 70 75 80
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
 85 90 95
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
 100 105 110
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
 115 120 125
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
 130 135 140
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
 145 150 155 160
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
 165 170 175
 Trp Arg Thr Ile Thr Gly
 180

<210> 2317
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 2317
 gccggcgggc tcgggaacgg tcaactgacct gcagcaggca atggcggctcg cggtttaaac
 60
 aggggtcttc acggagtttt ggatagtcgc tccagtcgcc actggcaagg cgcgaccagg
 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgc
 180
 gggtcagttc gatcagcgcg gtcgttcgag cgcttctcga acgcagcccc tgctggcgca
 240
 gacgtcggct gagggggcct ggtgtgagat gcaaccccg attcctgcca ggaagagacc
 300
 atccctcggg tcgggtgtctc gatgtgtcag cgagctcggc gatcgattc ccgaggacct
 360
 cgggcagttc gattggctcg gctccgatgg tgagcttccc cggctgtgat gtcacgtcga
 420
 cctgctcacc ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgctg
 496

<210> 2318
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2318
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
 1 5 10 15
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
 20 25 30
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
 35 40 45
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
 50 55 60
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
 65 70 75 80
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
 85 90 95
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
 100 105

<210> 2319
 <211> 1748
 <212> DNA
 <213> Homo sapiens

<400> 2319
 ntgatcaagt ctccgtctct ggattataacc ttgttcttc gaacttggat ctttctctgct
 60

gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaaact
120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga ttctttgat aagaaatgggt
180
gacaaacttc catctcagga tcatttgatt gtccaagaat acattgaaaa gcctttccta
240
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
300
aaaatatctt tctaccatga tgggcttctg cgaatggga cagagaagta cattccacct
360
aatgagtcga atttgaccca gttatacatg catctgacaa actactccgt gaacaagcat
420
aatgagcatt ttgaacggga tgaactgag aacaaaggca gcaaacttc catcaaatgg
480
tttcagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
540
gaattgttgg taaagacctt gattgttagc gaacctcatg tcctgcatgc ctatcgaatg
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660
attttgttgg atagaaaact aaagccatgg ctctcggaga ttaaccgagc cccaagcttt
720
ggaactgatc agaaaaatga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaa
780
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct
840
caaaggaggc tctatgggtc aaattcaatt aaaaggctct taccaggctc ctcagactgg
900
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgcgtcaa
960
gtacgaaagc agatctcagc agaagaacat gaaatcgcac atatggggaa ttatagacga
1020
atttaccctc ctgaagataa agcattactt gaaaagtatg aaaatttgtt agctgttgcc
1080
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1140
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1200
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1260
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1320
agcagctctt cagaatctga cgaataatgaa aaagaagagt accaaaataa gaaaagagaa
1380
aagcaagtta catataatct taaacctctc aaccactaca aattaattca acaaccagc
1440
tcataaagac gttcagtcag ctgcctctgg tcacatctctg ctcaatcacc ttccagttgg
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gacacccgcc cattttctcg tcaacaaatg atatctgtgt cacygccaac ttctgcatct
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1620
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1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccgggtttc
 1740
 caggaaag
 1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
1			5						10				15		
Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35				40					45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50				55					60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100					105					110			
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120					125				
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135						140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165						170					175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
	180							185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200					205				
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210				215					220					
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235				240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250						255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
	260					265						270			
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295				300					
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305					310					315				320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330						335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

340 345 350
 Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
 355 360 365
 Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
 370 375 380
 Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
 385 390 395 400
 Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
 405 410 415
 Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
 420 425 430
 Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
 435 440 445
 Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
 450 455 460
 Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
 465 470 475 480
 Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
 485 490 495
 Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
 500 505 510
 Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
 515 520 525
 Leu Pro Pro Thr
 530

<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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 cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgtctca gcaaatgcatt
 120
 acagggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaaaca
 180
 agtcacaggac accatcacag agcagtactt cccttgtgag atactctcag ctaagtaaga
 240
 attgagtgag acaacaataa aacaataacc cataggcttt tcaaacagta acaaccgcgt
 300
 cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc ttgtctttca
 360
 gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
 420
 cagaggtgga gtg
 433

<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1             5             10             15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
                20             25             30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
                35             40             45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
                50             55             60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
        65             70             75             80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
                85             90             95
Thr His Ile Asp Thr Ser Thr Gln Leu
                100             105

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<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

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120
ccaggcagag ccagctcggc ggcctccccc acatagctgg ggttagcagg ggttgcttct
180
ctgccgggca cagcgncttc caggagccag ccggggagag ctgagccaag gccgaaggag
240
cgccttcggc gettagccgc cccctcccg ccgttggtccc cagagcggac gctgggacgc
300
ccggggtctg gcagctctgc gcccggttag gagcggggcg gcgagcatta gcctgcgtcc
360
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcggggg cgtgaggatac
420
ctgtcagtga gcgccccgat tgcaaggccc ccgggtagt cctgccggcg agggggcgga
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<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1             5             10             15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
                20             25             30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
                35             40             45
Pro Arg Thr

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50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

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 120
 ccccgcaagg gccgcattat tcccgagacc gatgctgatg tgggtggtgtg ggaccagaa
 180
 gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
 240
 aacatgcgtc gccacggcgt gccactggtc accatcagcc gggggcgcgt cgtgtatgag
 300
 aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtccctgag gtccttccca
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 420
 cgactccct acctggggga tgcgctgtt gtcgtgcac
 459

<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

Xaa Arg Val Gln Asp Arg Met Ser Ala Ile Trp Glu Arg Gly Val Val
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 Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn
 20 25 30
 Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro
 35 40 45
 Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr
 50 55 60
 Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu
 65 70 75 80
 Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg
 85 90 95
 Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys
 100 105 110
 Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val
 115 120 125
 Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr
 130 135 140
 Leu Gly Asp Val Ala Val Val Val His
 145 150

<210> 2327

<211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

gaattccaga agatcaagta ttctctacgat gccctggaga agaagcagtt tctccccgtg
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tcagagatcc gagcagctga gaagaaattt gggagcaaca aggcccgagat ggtgggtgcct
180
gactttctcgg agctttttcaa ggagagagccc acagccccct tctttgtatt tcaggtgttc
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300
ctgggtggcgt tcgaggcctc gctgggtgcag cagcagatgc ggaacatgtc ggagatccgg
360
aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gaggccatt
420
gccagtgtat agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca
480
gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctctgcctc tgccctgcag
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599

<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
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Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
		20						25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
		35					40				45				
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
		50				55					60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
				70					75					80	
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
				85				90						95	
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120				125				
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
		130				135				140					
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
				150					155					160	
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
				165				170						175	
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

180 185 190
 Cys Phe Cys Cys Glu Ala Ala
 195
 <210> 2329
 <211> 392
 <212> DNA
 <213> Homo sapiens
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 120
 atgagcacgc aacccactga ggaaccactc cgactagtgt tggcattcaa tccagtgcct
 180
 agtgcctccc ggggtgctca tcatcatgcg acgagatttc gcctggcggg gcaggccttc
 240
 attgtcgtcg tcattggtgg tttgttggtg gcgttgacgg ccgacgcctt ccagttatcg
 300
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 360
 aatctgcggc tgcacgccgc tcgcaaggat cc
 392
 <210> 2330
 <211> 90
 <212> PRT
 <213> Homo sapiens
 <400> 2330
 Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
 1 5 10 15
 Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
 20 25 30
 Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
 35 40 45
 Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
 50 55 60
 Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
 65 70 75 80
 Asn Leu Arg Leu His Ala Ala Arg Lys Asp
 85 90
 <210> 2331
 <211> 2813
 <212> DNA
 <213> Homo sapiens
 <400> 2331
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 gatttaaggt gcccgagtc acgctgatgg actgccgtag acaactgaaa gacagtaagc
 120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg
180
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240
gggatttcagt tccccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca
300
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360
tttcgcttca ctctcaatgt gactctccct catcacctgt tgcccttggt tgcagacgtg
420
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480
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540
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660
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720
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780
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900
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960
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1080
acatgtatgt ttcttaagga aactgacatt aaaacttcag agaacacagc tgagtccaag
1140
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1200
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1260
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1320
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1380
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1500
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1620
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1680
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1740

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 1920
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 1980
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 2040
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 2100
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 2160
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 2220
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 2280
 tgcctgcag atgttcagac agactttatt gatcacaact ctccagtctac ctggaacacc
 2340
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 2400
 acaaagcacc gaagcttgtc tccaatgtct ggactttttg gttccatctg ggccccgcaa
 2460
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 2520
 gaaaaccaag cggctcgtgt caaggaatac tacccggggt tcaaccggtt tcgcgcctat
 2580
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 2640
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 2700
 aggccttggt tttgattact agtgtaaaact gggtatttag atagattatg acattgggtg
 2760
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 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro Asp Phe Thr Ser Ser Trp Val Ile Arg Asp Leu Ser Leu Val Thr
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 Ala Ala Asp Leu Glu Phe Arg Phe Thr Leu Asn Val Thr Leu Pro His
 20 25 30
 His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
 35 40 45
 Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
 50 55 60
 Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
 65 70 75 80
 Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Ser Gln Gln

85										90										95										
Asn	Asn	Gly	Pro	Met	Asp	Val	Ile	Ser	Pro	His	Ser	Tyr	Lys	Ser	Asn															
			100					105					110																	
Cys	Lys	Asn	Phe	Leu	Asp	Thr	Tyr	Gly	Pro	Ser	Asp	Lys	Gly	Arg	Gly															
			115					120				125																		
Lys	Asn	Cys	Leu	Pro	Val	Asn	Thr	Pro	Gln	Ser	Arg	Ile	Gln	Asn	Ala															
			130				135				140																			
Ala	Lys	Arg	Ser	Pro	Ala	Thr	Tyr	Gly	His	Ser	Gln	Lys	Lys	His	Lys															
			145				150			155					160															
Cys	Ser	Val	Tyr	Tyr	Ser	Lys	His	Lys	Thr	Ser	Thr	Ala	Ala	Ala	Ser															
			165						170						175															
Ser	Thr	Ser	Thr	Thr	Thr	Glu	Glu	Lys	Gln	Thr	Ser	Pro	Leu	Gly	Ser															
			180					185					190																	
Ser	Leu	Pro	Ala	Ala	Lys	Glu	Asp	Ile	Cys	Thr	Asp	Ala	Met	Arg	Glu															
			195				200				205																			
Asn	Trp	Ile	Ser	Leu	Arg	Tyr	Ala	Ser	Gly	Ile	Asn	Val	Asn	Leu	Gln															
			210				215				220																			
Lys	Asn	Leu	Thr	Leu	Pro	Lys	Asn	Leu	Leu	Asn	Lys	Glu	Glu	Asn	Thr															
			225				230				235				240															
Leu	Lys	Asn	Thr	Ile	Val	Phe	Ser	Asn	Pro	Ser	Ser	Glu	Cys	Ser	Met															
			245					250							255															
Lys	Glu	Gly	Ile	Gln	Thr	Cys	Met	Phe	Pro	Lys	Glu	Thr	Asp	Ile	Lys															
			260					265					270																	
Thr	Ser	Glu	Asn	Thr	Ala	Glu	Phe	Lys	Glu	Arg	Glu	Leu	Cys	Pro	Leu															
			275				280					285																		
Lys	Thr	Ser	Lys	Lys	Leu	Pro	Glu	Asn	His	Leu	Pro	Arg	Asn	Ser	Pro															
			290				295				300																			
Gln	Tyr	His	Gln	Pro	Asp	Leu	Pro	Glu	Ile	Ser	Arg	Lys	Asn	Asn	Gly															
			305				310				315				320															
Asn	Asn	Gln	Gln	Val	Pro	Val	Lys	Asn	Glu	Val	Asp	His	Cys	Glu	Asn															
			325					330						335																
Leu	Lys	Lys	Val	Asp	Thr	Lys	Pro	Ser	Ser	Glu	Lys	Lys	Ile	His	Lys															
			340					345					350																	
Thr	Ser	Arg	Glu	Asp	Met	Phe	Ser	Glu	Lys	Gln	Asp	Ile	Pro	Phe	Val															
			355				360					365																		
Glu	Gln	Glu	Asp	Pro	Tyr	Arg	Lys	Lys	Lys	Leu	Gln	Glu	Lys	Arg	Glu															
			370				375				380																			
Gly	Asn	Leu	Gln	Asn	Leu	Asn	Trp	Ser	Lys	Ser	Arg	Thr	Cys	Arg	Lys															
			385				390				395				400															
Asn	Lys	Lys	Arg	Gly	Val	Ala	Pro	Val	Ser	Arg	Pro	Pro	Glu	Gln	Ser															
			405					410						415																
Asp	Leu	Lys	Leu	Val	Cys	Ser	Asp	Phe	Glu	Arg	Ser	Glu	Leu	Ser	Ser															
			420					425					430																	
Asp	Ile	Asn	Val	Arg	Ser	Trp	Cys	Ile	Gln	Glu	Ser	Thr	Arg	Glu	Val															
			435				440					445																		
Cys	Lys	Ala	Asp	Ala	Glu	Ile	Ala	Ser	Ser	Leu	Pro	Ala	Ala	Gln	Arg															
			450				455				460																			
Glu	Ala	Gly	Tyr	Tyr	Gln	Lys	Pro	Glu	Lys	Lys	Cys	Val	Asp	Lys	Phe															
			465				470				475				480															
Cys	Ser	Asp	Ser	Ser	Ser	Asp	Cys	Gly	Ser	Ser	Ser	Gly	Ser	Val	Arg															
			485					490						495																
Ala	Ser	Arg	Gly	Ser	Trp	Gly	Ser	Trp	Ser	Ser	Thr	Ser	Ser	Ser	Asp															
			500					505					510																	
Gly	Asp	Lys	Lys	Pro	Met	Val	Asp	Ala	Gln	His	Phe	Leu	Pro	Ala	Gly															

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515          520          525
Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
530          535          540
Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
545          550          555
Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
565          570          575
Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
580          585          590
Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
595          600          605
Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
610          615          620
Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
625          630          635
Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
645          650          655
Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
660          665          670
His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
675          680          685
Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
690          695          700
Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
705          710          715
Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
725          730          735
His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
740          745          750
Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
755          760          765
Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
770          775          780
Tyr Cys Gly Asn Val
785

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<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

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120
gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
180
aaaagctatc atattgctta tgaagcacat aaagggtcagt tccgaaaaaa cggattacca
240
tacattatgc atcctataca agttgcagggt attttaacag aaatgcgatt agacggcagg
300
acgattgtcg caggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
360

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gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atgggtgtgac gaagcttaaa
 420
 aaaataaaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttatttatt
 480
 gcgattgccca aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
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 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 360
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 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
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 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
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 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
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 ttctctgcac cagcttcctt gctggggctcc agggcccaca ggctgaggcc gggggcccag
 180
 ggggtcaatgc caggcacctt gctattgagg aacctatcca ggaggaagga ctcgggcaga
 240
 cctgcgggat cctcgtccctc ccacgggtcc tcattggcaga agcagaagga gctggagctg
 300
 ctgaggtccg tgggcaggcg ggcctgggcc aacgtggggt caccgacctc ctcaaaagt
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

```

65              70              75              80
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser
              85              90              95
Ser Lys

```

```

<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens

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<400> 2339
acgcgtggcg tcagtcagg cagactggg aggtgccta caccgtcaac tcggtgcga
60
ccctgtccct caccctctgc gtcgcagtcg tcagtgctct gtggtttgtg ccctccgggc
120
actggtcccg gtagggcttg taatgctggg gcgctcggcg cgatgtgccca gttccttggt
180
gagttactcc tccactactgg tgtgaacaag accggagaat tccccccat attctcgttt
240
cccgctcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgctctgc ggcacggctg gcagggggat catgtcatga gtccgacggt gagcgagcgg
360
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420
ttgtcggggg gcggtgctg
439

```

```

<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens

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<400> 2340
Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys
1          5          10          15
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg
20          25          30
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala
35          40          45
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
50          55          60
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
65          70          75          80
Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala
              85              90

```

```

<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens

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```

<400> 2341

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gccaaacctc cctccatcc tgcccaagat ggatcttgct gagcctccct ggcataatgcc
 60
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaaggggaag aagaggagag
 120
 ggagaaggaa gcagaggagg agggaggaaga ggaagagctg ctctgttgag cgggtcccca
 180
 ggagccaccg cacaggccca tgcccttcca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccaccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacactt gtcagtgcgc tcagtcaccc caagtacagt
 360
 ggccccgggg gtccagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
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Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
			35				40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
			50				55				60				
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
			65			70				75				80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

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 60
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgatc agagctcaat gcccatgagc aacgtgggca ccaccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tctcctggg accgtgcatt cagccccaaa ccgggggcta
 240
 gccaggcggc ctctggacct caccatcagt attaatcaga tgggctcacc gggcatgggg
 300

cacttgaagt cgccccacct tagccaggtg cactcaccce tggtcacetc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atggtgccct tgccttctgc caaccgcga
 420
 ggacctctca agtcgcccc ggtcctcgcc tctccctca gtgtccgttc acccaactggc
 480
 tcgcccagca ggctcaagtc tcttccatg gcgggtgcctt ct
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
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Gln	Gly	Phe	Ser	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp	
		20				25					30				
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
		35				40					45				
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
	50				55						60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
	65				70				75					80	
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
		85						90					95		
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
		100						105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
		115						120					125		
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
		130				135						140			
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
		145			150				155					160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
			165						170						

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

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 120
 ctggcgctgc cgcccttttg cgttttccgc cttttcttgc gcttctgggtg cttgctggag
 180
 gcctgcgcgc cgcctcgcc tgcgctgtcc gagtcttgg cgctgtcgga cgtgagtgc
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaataatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttcoga atctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacagagaac
 480
 tccaagnttc cgacgagaag gggaaccagt ccgagaacac cgaagaccgc gagcccgacc
 540
 ggagaagtc gggcaacgcg t
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp
 1 5 10 15
 Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu
 20 25 30
 Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Cys Arg
 35 40 45
 Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro
 50 55 60
 Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp
 65 70 75 80
 Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile
 85 90 95
 Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu
 100 105 110
 Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu
 115 120 125
 Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser
 130 135 140
 Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn
 145 150 155 160
 Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr
 165 170 175
 Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg
 180 185

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

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 60
 gagaacgtcg agtacgcctg cgccgcgcgc gaagtactga aggggtgaata cagccgtaac
 120
 gtcggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggt ggcgggggac
 180

acgccattca acttcccggc gatgggtgcc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gcggtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg ttgcccacaa ggtgtgctga acgtgggtgca tggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5				10					15		
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
				20				25					30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
				35				40					45		
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
				50				55				60			
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
				65				70				75			80
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
				85				90					95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
				100				105					110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
				115				120				125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

nnnaaaaaaa aaaaaaaaaa aaaaacacaa tattttaatgg acgcggttta ttcagcagggt
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 gctgacaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt
 120
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgcgcct
 180
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtctg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatt
 300
 actggggcac ctactcgagc tgtagaaciaa gaaggcaaat acgttcacca ttcccttggc
 360
 gaaggaaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct
 417

<210> 2350

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2350

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Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1           5           10           15
Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
          20           25           30
Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
          35           40           45
Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
          50           55           60
Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
65           70           75           80
Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
          85           90           95
Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
          100          105          110
Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
          115          120          125
Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
          130          135

```

<210> 2351

<211> 696

<212> DNA

<213> Homo sapiens

<400> 2351

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120
ggcaataactg tgctcgctca gccgaatgat gccggcatga ttcgtattga gcacaacctc
180
ggcaccgcgc tgctcttgga cgctaacgga cgccagacca cccttaaccc gtatcttggc
240
gcccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccgggtg
300
gctgtcactg attgcctcaa ttatggctcc ccgtacgata ccgatgtcat gtggcaattc
360
gacgagacca tccttgggtct ggttgacggc tgcgcgagc ttggcgtgcc ggtaacgggc
420
ggtaacggtt cctgcacaa ccgcaactga gatgagtcga ttccgcttac tccgctcgtt
480
ggtgtgtctg cggttattga tgacgtgcat cgtcgcatcc cgtcggcctt cgcacacgac
540
ggcgacgctg tcttctgctg aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
600
gacgtcatcc acgtgggcca cctaggcggg atgccccca tgcgccacct gaatccgag
660
aaggccctgg ccgcgggtgat ggtggaagcg tcgaag
696

```


<210> 2352

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2352

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Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu
 1           5           10           15
Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr
 20           25           30
Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
 35           40           45
Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50           55           60
Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65           70           75           80
Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85           90           95
Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
100           105           110
Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
115           120           125
Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Asn Val Ser
130           135           140
Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
145           150           155           160
Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
165           170           175
Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
180           185           190
Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
195           200           205
Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
210           215           220
Ala Val Met Val Glu Ala Ser Lys
225           230

```

<210> 2353

<211> 422

<212> DNA

<213> Homo sapiens

<400> 2353

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nnagcaactc cagaagaatt gctggctgag ttttcaaact atgggtgtcaa agtagtaccg
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atttcagggtg atgtttcaga ctttgcagat gccaaagcgt tggtagatca agcgattaca
120
gaactcgggtt ctgttgatgt ctgtgtcaac aatgctggga tcaactcaaga tacgcttatg
180
ctcaaatgta ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc
240
aacatgacgc aagcagtcctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac
300

```

atgtctagtgtg ttggtcggttt gatgggaaat atcggacaag ccaactatgc agcttctaaa
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 gcaggtctga ttggttttac caagtcagtt gcacgtgaag ttccaatcg caacgtacgc
 420
 gt
 422

<210> 2354
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2354
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 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys
 20 25 30
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu
 35 40 45
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
 50 55 60
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
 65 70 75 80
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly
 85 90 95
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly
 100 105 110
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys
 115 120 125
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg
 130 135 140

<210> 2355
 <211> 5191
 <212> DNA
 <213> Homo sapiens

<400> 2355
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 120
 cggggcctgtg tgctgcgaaa caccgagtgg tgcttcgggc tggatcatctt tgcaggctct
 180
 gacactaagc tgatgcaaaa cagcggcaga acaaagttca aaagaacgag tatcgatcgc
 240
 ctaatgaata ccttggtgct ctggattttt ggattctcgg ttgcatggg ggtgatctcg
 300
 gccattggca atgccatctg ggagcacgag gtggggatgc gtttcagggt ctacctgcg
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 420
 atcctctca acacgcttgt gccatttca ctctatgtca gtgtggaggt catcgcgtcg
 480

ggccacagct acttcaccaa ctgggataag aagatgttct gcatgaagaa gcggacgcct
540
gcagaagccc gcaccaccac cctaaacgag gagctggggc aggtggagta catcttctcc
600
gacaagacgg gcaccctcac ccagaacatc atgggttttca acaagtgtct catcaatggc
660
cacagctatg gtgatgtgtt tgacgtcctg ggacacaaaag ctgaattggg agagaggcct
720
gaacctgttg acttctcctt caatcctctg gctgacaaga agttcttatt ttgggacccc
780 aggtctgtcaa gatcggggac cccacacgc atgagttctt ccgcctcctt 840
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900
cagtccccag atgagggggc cctggtcacc gcagccagga actttggttt tgttttcgcg
960
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1140
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1200
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1260
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1320
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1380
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1440
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1560
gagntcagg aaagcccggg agaagatgat ggactcatcn nccgctccgt aggcaacggc
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1680
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1740
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1800
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1860
gccattggag acggagccaa tgatgtcagc atgatcaaaa cggctcacat tgggtgtggg
1920
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1980
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2040
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2100
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2160

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2220
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2280
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2340
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2400
cagtcccttg cagtcactgt ggcacatcc ttggtcattg tgggttagcgt gcagattggg
2460
ctcgacacag gctactggac ggcacatcaac cacttcttca tctggggaag ccttgcgtgt
2520
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2580
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2640
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2760
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tgaaggccga ggatggatgc cctgtgccag tgaccagagc acccagggct ggcacgtcac
3060
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3780

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 3900
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 3960
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 4860
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 4980
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 5040
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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Leu Ala Lys Phe Asp Gly Glu Val Ile Cys Glu Pro Pro Asn Asn Lys
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Leu Asp Lys Phe Ser Gly Thr Leu Tyr Trp Lys Glu Asn Lys Phe Pro
20      25      30
Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
35      40      45
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
50      55      60
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
65      70      75      80
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
85      90      95
Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
100     105     110
Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
115     120     125
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
130     135     140
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
145     150     155     160
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
165     170     175
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
180     185     190
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
195     200     205
Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
210     215     220
Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
225     230     235     240
Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
245     250     255
Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
260     265     270
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
275     280     285
Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
290     295     300
Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
305     310     315     320
Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
325     330     335
Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
340     345     350
Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
355     360     365
Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
370     375     380
Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
385     390     395     400
Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
405     410     415
Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

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420 425 430
 Ser Arg Glu Asp Arg Leu Ala Ser Ile Tyr Glu Glu Val Glu Asn Asn
 435 440 445
 Met Met Leu Leu Gly Ala Thr Ala Ile Glu Asp Lys Leu Gln Gln Gly
 450 455 460
 Val Pro Glu Thr Ile Ala Leu Leu Thr Leu Ala Asn Ile Lys Ile Trp
 465 470 475 480
 Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Val Asn Ile Gly Tyr Ser
 485 490 495
 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly
 500 505 510
 His Thr Val Leu Glu Val Arg Glu Glu Xaa Gln Glu Ser Pro Gly Glu
 515 520 525
 Asp Asp Gly Leu Ile Xaa Arg Ser Val Gly Asn Gly Phe Thr Tyr Gln
 530 535 540
 Asp Lys Leu Ser Ser Ser Lys Leu Thr Ser Val Leu Glu Ala Val Ala
 545 550 555 560
 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu
 565 570 575
 Glu Ala Asp Met Glu Leu Glu Phe Leu Glu Thr Ala Cys Ala Cys Lys
 580 585 590
 Ala Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val
 595 600 605
 Glu Leu Val Lys Lys Tyr Lys Lys Ala Val Thr Leu Ala Ile Gly Asp
 610 615 620
 Gly Ala Asn Asp Val Ser Met Ile Lys Thr Ala His Ile Gly Val Gly
 625 630 635 640
 Ile Ser Gly Gln Glu Gly Ile Gln Ala Val Leu Ala Ser Asp Tyr Ser
 645 650 655
 Phe Ser Gln Phe Lys Phe Leu Gln Arg Leu Leu Val His Gly Arg
 660 665 670
 Trp Ser Tyr Leu Arg Met Cys Lys Phe Leu Cys Tyr Phe Phe Tyr Lys
 675 680 685
 Asn Phe Ala Phe Thr Met Val His Phe Trp Phe Gly Phe Phe Cys Gly
 690 695 700
 Phe Ser Ala Gln Thr Val Tyr Asp Gln Tyr Phe Ile Thr Leu Tyr Asn
 705 710 715 720
 Ile Val Tyr Thr Ser Leu Pro Val Leu Ala Met Gly Val Phe Asp Gln
 725 730 735
 Asp Val Pro Glu Gln Arg Ser Met Glu Tyr Pro Lys Leu Tyr Glu Pro
 740 745 750
 Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Glu Phe Phe Ile Cys Ile
 755 760 765
 Ala Gln Gly Ile Tyr Thr Ser Val Leu Met Phe Phe Ile Pro Tyr Gly
 770 775 780
 Val Phe Ala Asp Ala Thr Arg Asp Asp Gly Thr Gln Leu Ala Asp Tyr
 785 790 795 800
 Gln Ser Phe Ala Val Thr Val Ala Thr Ser Leu Val Ile Val Val Ser
 805 810 815
 Val Gln Ile Gly Leu Asp Thr Gly Tyr Trp Thr Ala Ile Asn His Phe
 820 825 830
 Phe Ile Trp Gly Ser Leu Ala Val Tyr Phe Ala Ile Leu Phe Ala Met
 835 840 845
 His Ser Asn Gly Leu Phe Asp Met Phe Pro Asn Gln Phe Arg Phe Val

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      850              855              860
Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
865              870              875              880
Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
      885              890              895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
      900              905              910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
      915              920              925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
      930              935              940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
945              950              955              960
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile
      965              970              975
Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
      980              985              990
Gly Ala Asp Lys Pro Leu Lys Gly
      995              1000

<210> 2357
<211> 408
<212> DNA
<213> Homo sapiens

<400> 2357
naccggttac gttgctggag gtcaatgcgt catgccgata catcatcaga tccgcactgt
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ggcgaccatc cttgccacca ttaccattgc cgccttagtg ctcacggggt gtaatacggc
120
ggtgcgccaa acggtgaaga cgaggtttcc cgcaagctca tcaccgtgtg ggggtgctgag
180
ccacaaaacc cactcctgcc agccgacacc aatgaaacgg gcggcacgaa agtcatcacc
240
gccttggttg ccggcctggt gtattacgac gcgacggcca aaacccataa tgatgtggcc
300
aaatccattg acttcgatgg cgaccgcacc tacacgggtga cgctgcggaa aaccagattc
360
gccgacggta ctgaggtgaa ggcccataat ttgtgaaaag ctgcccgca
408

<210> 2358
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2358
Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
1          5          10          15
Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
20          25          30
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
35          40          45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

```



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      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
65              70              75              80
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
      85              90              95
Ala Ala

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<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 2359
aacctgaaca tgttgggatt gagagagccc gaggtgtatg ggtcggaaac attggcogac
60
gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa
120
accaatcacg aaggggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
180
attgtgatca atccaggagc atggacccat acatcggcag ccattccacga tgcgttgatt
240
gcagccgagg taccggtgat tgagggttca atctcaaatg tccacaggcg tgaagatttc
300
aggcattttt cctacgtgtc acgc
324

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<210> 2360
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 2360
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu
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Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu
20              25              30
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
35              40              45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
50              55              60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65              70              75              80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
85              90              95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
100              105

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<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

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 gtcaggggacc ggtatggaag cctcagtagg gctggagccc catcatgccc cttccgagca
 120
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgcctgtcc tcacggagct
 180
 gtagggagag tcccaaaggc aggtggtggg gctggggcct ccaacagctg ggctccttca
 240
 tatcacttaa ggccaacag cacacagtct ccaagtgtg ccaggtgcc caacacggcc
 300
 atcccgtct cacagctcca ccccgctgc ctgcctgcc ccatctccac aaacatatgc
 360
 tgcagctcca caccgggaa acaccacatg ctgcctt
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met Pro Leu Pro Ser Arg Ser Thr Gln Thr Ser Trp Ser Arg Gly Thr
 1 5 10 15
 Ser Ile Pro Ala Leu Ser Ser Arg Ser Cys Arg Glu Ser Pro Lys Gly
 20 25 30
 Arg Trp Trp Gly Trp Gly Leu Gln Gln Leu Gly Pro Leu Ile Ser Leu
 35 40 45
 Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His
 50 55 60
 Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His
 65 70 75 80
 Leu His Lys His Met Leu Gln Leu His Thr Arg Glu Thr Pro His Ala
 85 90 95
 Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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 cagcacaagg ggaggtccca agaaccagaa cttacatcac tgcctccgag ttcagaggt
 120
 tcctttccca cctttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc
 180
 tcccctgatg tgctggcctc cgtttccatc gcttctcat ggcgttcttc gcggcgggtg
 240
 tccaagccca ctgcangtcg aagcaaacgt gattgcgtta ccactcagaa ggtggcagag
 300
 ggactggcag cggtgccatc tgggagtcgt tgtgtcagc ctccgagtc aggtttcccc
 360

ggccccctgct gtgggtgctag gtccccagat gagagatcac ggcatgaag atcagcccc
 420
 aaggcagccc ctccntctcc agcctggggt ctggcggtgtt ctagggtgctc acttccatgg
 480
 ctggcctgct cacagagccc tacctcagcc tegtgttaagc gcacctgctc ggccctgggtg
 540
 ctctatgatg agccaccagt cagtcttgca gatgtgtccc cgagctcctg ccgaggggacg
 600
 aaacacgggtg gccctgctcc tagtgctgtg gcacgccaag ctccacacct gccactgccc
 660
 ctccaccac ctgctccccc aggggctccg cctcgtgact cagcgtcagg caagtctccg
 720
 ggcgcgcaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg
 780
 gtggatctcc ggaggtcacc gatgtggaca gactgccaca gcccttcacg cgt
 833

<210> 2364

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2364

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Lys	His	His	Gln	Gln	His	Lys	Gly	Arg	Ser	Gln	Glu	Pro	Glu	Leu	Thr
			20					25					30		
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
			35				40					45			
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50					55					60				
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65				70					75					80	
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
			85					90						95	
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
			100					105					110		
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
			115				120					125			
Pro	Asp	Glu	Arg	Ser	Arg	Ser									
		130				135									

<210> 2365

<211> 429

<212> DNA

<213> Homo sapiens

<400> 2365

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 ctccgtcagt tcgccaaca acctctgaac gaagtaaga ttctccggca ctggagccaa
 120
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg
 180

atggtgatgg gactcgggtt ccaaccacgg ttccatgtga cccagacagt tctggttggc
 240
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt
 300
 caccgggctg cggtcggccc acacctcttc ctcaccgagg taggcaaatc ccgttccacc
 360
 atagagctca aggtgattga gaccacaccg cgccatgaag cgcgtcagga aatcaagagt
 420
 ggaacgcgt
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met Ala Arg Cys Gly Leu Asn His Leu Glu Leu Tyr Gly Glu Ala Gly
 1 5 10 15
 Phe Ala Tyr Arg Gly Glu Glu Glu Val Trp Ala Asp Arg Ser Pro Val
 20 25 30
 Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly
 35 40 45
 Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp
 50 55 60
 Leu Glu Thr Glu Ser His His Arg Cys Glu Asn Pro Asp Gly Val
 65 70 75 80
 Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val
 85 90 95
 Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu
 100 105 110
 Thr Val Ser Ser Lys Phe Leu Asn Val Gly Leu Asp Glu Pro Trp Glu
 115 120 125
 Leu Gly Thr Gly
 130

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

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 ggggggtcacg agctcaccga cgcgcgcgcg ttccctcgt ggggcgtcga tttcgtcaaa
 120
 taagatcggt gctccggtga ctcgcgcgac gacgaccagg tcgcctcgtt caccgcgatg
 180
 cgtgacgcaa tccgatccac cggagcgcgc atggtgtaca gcatcaaccc caacacggaa
 240
 tcgcgggagc ggtccggagc ccaattcgtat tggggcggtg tggcaacccat gacacgtacc
 300
 accaagcaca tctcgcgggt gtggaccact cggccggcgc gtgcgatgc gacacgggca
 360

tcgggggtatc aggggatccg cgacatcacc gacgccgtgg ccccgatcgg cgcacgggtt
 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgctggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
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 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
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 aaggggagcg cccctgggacc taaccacagag ccccatctca cttccccccg ttctttcaaa
 120
 gtgctctccc caaccacagt caggacttcg tccatcccag ttcaggaagc acaaggagct
 180
 ccgaaagga agagggggcc accaagaagg ctccagccg actcccactg cctccagct
 240
 tccacatccg ccccgccctc caggtctacc cagacaggge ccccgagenc agactgccct
 300
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gcctccagcc cctccctctc ccctctct
 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1 5 10 15
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
 20 25 30
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35 40 45
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50 55 60
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65 70 75 80
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
 85 90 95
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
 100 105 110
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
 115 120 125
 Pro Ala Pro Pro Leu Pro Pro Pro
 130 135

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371
 gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg
 60
 agagggttgc cagggcaccc agttacagct ggagctgcag gggaccatc cctcagagaga
 120
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
 180
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaacaa
 240
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
 caggcggggc aaggttttca tgcagcn
 327

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1 5 10 15
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
 20 25 30
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

          35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
   50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
   85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
          100

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<210> 2373

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2373

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gaattctgac attcaggaag tcaattgcag aagggtttaac caagttgatt ctgtttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaagttctt
120
catttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctactttc
300
cgctttgtct tcacaggcac gtaagactca gaagacagta ttaaagatg ctaactcaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aataccctaa tgactggtaa
420
ccaactgaat tgaagaaca tggaaactcc aagtactttc aatgtaagt gcagggtttt
480
ggcaactcc ttttgcatgt gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtcttttc ctgtggaaaa a
591

```

<210> 2374

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2374

```

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
50              55              60
Asn Glu Asn Met Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```


[illegible]

```
<210> 2377
<211> 622
<212> DNA
<213> Homo sapiens
```

```

400> 2377
acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccaccag agatgaaaag aaccaatcct gggtggtcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaatgga accagcagat agaagttaga attttcttgt tagtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatag ttccatatca ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaaatgtc atttctcatg attccttaaa
540
acaatttttg taaattctat tcttaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

```

```
<210> 2378
<211> 109
<212> PRT
<213> Homo sapiens
```

<400> 2378

Met	Ser	Phe	Ile	Met	Pro	Leu	Lys	Ser	Phe	Arg	Ala	Lys	Asn	Ile	Ile
1			5					10					15		
Phe	Thr	Phe	Gln	Phe	Tyr	Val	Cys	Gln	Ser	Ile	Leu	Phe	Tyr	Ala	Phe
			20					25					30		
Ser	Cys	Ile	His	Ile	Phe	Lys	Asn	Ile	Ser	Pro	Asn	Arg	Lys	Ile	Pro

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
  50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
  65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcaccagggt gcaccagccc
  60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
  120
ggaacataaa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
  180
cagtgctgtg caggtctgtg cagatgaggg cctccaggac acgagggaact actgcgtcac
  240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggagcg acaccacaca
  300
cacacacaag cagggaagct gtgcagcagt ggggagaaag ca
  342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1              5              10              15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
  20              25              30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
  35              40              45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
  50              55              60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
  65              70              75              80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85              90              95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100              105              110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc
 60
 ggccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
 120
 ccgtcctctt tgacatggac ggaaccctgc tcaacacctt gccggcctgg tgcgtggcat
 180
 ctgagcatct gtggggcact tctctggctg acgctgacag cgccaaggtt gacgggggca
 240
 cgctcgacga cgctcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca
 300
 ccatacgagcgt ttctatggac atccttgacg ccaacctggc tggccacacc gagccgatc
 360
 ccggagctga ccgcctcgtg aagaggctgt caggtcatgt acccatcgct gtgggtgtcga
 420
 attccccgac gcgt
 434

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
				20				25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
				35			40						45		
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
				50			55					60			
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
						70				75				80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
						85				90				95	
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
				100				105						110	
Ser	Pro	Thr	Arg												
				115											

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcattggatt
 60
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
 120

cagaaaaacgc ccactctccc ttccccaggc gcgggcgctc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccc cttctgtact cggatgggct cggcggtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcactctgt
 300
 cttttctgat gccaccacc ttgttacata ttctgcatg caaacacct tgtgattttt
 360
 ggcgagtg c aacatggtat gtgtatgcca ctg
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1			5					10					15		
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25				30			
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
		35				40					45				
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
	50				55					60					
Asp	Val	Arg	Cys	Val	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu	
65				70				75					80		
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Ile	Ala	Thr	Arg	Arg	Arg	
			85					90				95			
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100				105					110			
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
	115						120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttgttat
 60
 gcactgtgct gtggactctt gttgtggggt cctaggtctg ccagcattt tggggttcac
 120
 cccgtgacc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt
 180
 cccctcacc cagagagcct gcttctctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccct caagtctctg tgcctgacc ccaagcatag gcctgagtg cctctggggc
 300
 caagggcctt tacgcactac tctctggggc ccaactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcacccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggcg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccca cccgggcgcg ccccggcccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgcct ctgctgggga
 240
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggaactt
 300
 ggggttgtgag tgcctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaaatgtc cggcggtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgtctcgtg ttgcacctcg
 480
 tgtgcctgtg tgtccgtatt tgagtgccta caggaatgtg ggtggtgagt acccgatatgt
 540
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatagct gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttgaggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1             5             10             15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
 20             25             30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
 35             40             45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
 50             55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcacggcca tcgtcaccat gaagaagtcg
60
tatccggggc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt togttatcgt caccgacgac gatataacg ccgcgcactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataaacag
240
ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatgggggctc
300
gatcccaacg acaaatggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1             5             10             15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
 20             25             30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
 35             40             45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
 50             55             60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
 65             70             75             80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
 85             90             95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
100             105             110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag ccgccacct acgttttagtc gcgaagcgtg tcggctccat
 60
 gtcattccg gagctacacc atgaataaag tactacctga tccaccatc gatcccgcaa
 120
 aagacgcggt cgctttcaac cgcgccatcg accattacct gctaccacag ggcttccact
 180
 gcgtcaacga agacctgagt ttcgaagacg cctgctcta caccgccagc ctgctcgaca
 240
 gtgctctgc caggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
 300
 tcctggcgtg gtggcatttg ctggaaattg caaaaaccac cgtagatcgc tcccccatcg
 360
 agtgcctgac cgcaccaaag cctgcct
 388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg
 1 5 10 15
 Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe
 20 25 30
 His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr
 35 40 45
 Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu
 50 55 60
 Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu
 65 70 75 80
 Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu
 85 90 95
 Thr Ala Pro Lys Pro Cys
 100

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtcgggc
 60
 atgggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
 120
 tgcgcccgt tccgcattc cggcctgcg gtggtagacg aggacggcac cctgatgggc
 180
 atttgacacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
 240

atgacggccta tgccgcttgt tgttgcgcgc gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc
 360
 ggccctgatta cagtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2394
 Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg
 1 5 10 15
 Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met
 20 25 30
 Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly
 35 40 45
 Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr
 50 55 60
 Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val
 65 70 75 80
 Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys
 85 90 95
 Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile
 100 105 110
 Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe
 115 120 125
 Val Lys Thr Glu Gln Tyr Pro Asn Ala
 130 135

<210> 2395
 <211> 362
 <212> DNA
 <213> Homo sapiens

<400> 2395
 aagcttttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata
 60
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac
 120
 ttagcaatat taatctgacc ttttctgggt gattgggcat ttagtaataa tgcgggggcca
 180
 atatcatcat actttccaaa tatttttgat ttitttagaca tcaactgaag ttgtgacct
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2396

```

Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1           5           10           15
Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
          20           25           30
Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
          35           40           45
Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
          50           55           60
Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
          65           70           75           80
Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
          85           90           95
Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
          100          105          110
Asn Ser Ser Glu Ser
          115

```

<210> 2397

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2397

```

nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc
60
tagtgactact ctggtccttc tcgctccctc cctacgggga ccacacttcc tacaccatgg
120
aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaaagca
180
aggggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat
240
acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
300
ccaagctggc ttttatcatt gtcatggagc acgtcatcta ctctgtgaaa tttttcattt
360
catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
420
taacccaaaa gcttcttcat gagaatcac
449

```

<210> 2398

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2398

```

Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1           5           10           15
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

```

                20                25                30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
      35                40                45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
      50                55                60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
      65                70                75

```

<210> 2399

<211> 344

<212> DNA

<213> Homo sapiens

<400> 2399

```

acgcgtcatg cttcacgaaa cgggtcacgc gtttcattac caagcagctg gcaaacacaa
60
gttgatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaaag aacaggaact
180
agtcaaaacc tttgctgggc cggccaggct tggagggggt cgaaaaccta caacgccaca
240
aaacgggttc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactgat
300
accgtatggc ttgagatgcg acacacgctc ggggtggatt ggctc
344

```

<210> 2400

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2400

```

Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
  1                5                10                15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
      20                25                30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
      35                40                45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
      50                55                60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
      65                70                75                80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
      85                90                95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
      100                105                110

```

<210> 2401

<211> 479

<212> DNA

<213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgcctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gacttttgagt ttctctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctactctcc tcgagctcac aggcgacgac ggcggctggt ggatctttt caccaacctc
 300
 gtggacaagt acggcgagct cccggccgag gtcatgcctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgaga tatcgccacc atcatccgcc gcgccgcgca ccgtgcgggtg
 420
 gaaggcgagg gggatcgagg gggcatcgct aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10				15		
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25				30			
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40				45				
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
		50			55						60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65				70				75					80		
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90					95		
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
			100					105				110			
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115				120					125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130				135						140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150						155				

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

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 120

ttctcctaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtccoga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggctggttca ccaacgtgac caactttggc gcctttgttg atactggcgt gcacaggac
 360
 ggtttgggtgc acatctctgc acttttcg
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa Met Asn Gly Asp Asn Pro Leu Asp Ser Ser Ala Val His Pro Glu
 1 5 10 15
 Ala Tyr Pro Leu Val Gln Arg Ile Ala Ala Glu Thr Gly Arg Asp Ile
 20 25 30
 Arg Ser Leu Ile Gly Asp Ala Ala Phe Leu Lys Arg Leu Asp Pro Lys
 35 40 45
 Lys Tyr Thr Asp Glu Thr Phe Gly Val Pro Thr Ile Thr Asp Ile Leu
 50 55 60
 Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr
 65 70 75 80
 Ala Glu Phe Gln Asp Gly Val Glu Asp Leu Lys Asp Leu Gln Pro Gly
 85 90 95
 Met Ile Leu Glu Gly Val Val Thr Asn Val Thr Asn Phe Gly Ala Phe
 100 105 110
 Val Asp Ile Gly Val His Gln Asp Gly Leu Val His Ile Ser Ala Leu
 115 120 125
 Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
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 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt
 120
 ctcaactcac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ccttcacttc tcccctggca atgctctgcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggctcacca ccaccacccc caatgccag accgcagacc
 300
 tgcattccct ccatctcaca gccccaaatc caaacggtta ttcattctac ctcccatcct
 360

actctctacg aattttcttcc accgtagact ctggttaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtcttaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgcctgcac tccccctgca ggtgctgggg acaccgaac cctctctctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tcactgtctt tcaccaatta caccatgagc tcacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgtctagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata caggagagcaa ggaagcttga gccctctcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met Asp Arg His Leu Val Ser Leu His Leu Ser Pro Gly Asn Ala Trp
 1 5 10 15
 Pro Pro Asp Thr Trp Pro Pro Ser Ser Phe Gln Gln Ser Trp Tyr Gln
 20 25 30
 Arg Met Ala His His His Pro Pro Gln Cys Pro Asp Arg Arg Pro Ala
 35 40 45
 Phe Leu Pro Ser His Ser Pro Lys Ser Lys Pro Leu Phe Ile Leu Pro
 50 55 60
 Pro Ile Leu Leu Leu Thr Asn Phe Phe His Arg Arg Leu Trp Leu Ile
 65 70 75 80
 Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln
 85 90 95
 Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala
 100 105 110
 Ala Leu Pro Leu Gln Val Leu Gly Thr Pro Gln Pro Ser Ser Trp Gly
 115 120 125
 His Leu Leu Ala Phe Ala Gly Pro Arg Gly Ser Leu Leu Pro Gly Ser
 130 135 140
 Arg Leu Trp Val Arg
 145

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggt ttatcttcag catggtgacg gcgattgggt tagccgttat ggctgcgggc
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gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatgggtggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atcccggtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg
 240
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 300
 tac
 303

<210> 2408
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2408
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
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 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2409
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 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccagggtgg
 240
 cccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtggt gg
 322

<210> 2410
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
 20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
 35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
 50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
 65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
 85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

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ccatgggctg ggtgctggag acacgagatc aggcaggccc tgccctggg gctcattcta
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gggtctgcgg cagacagggg gacagagggg gctgtgagag ccctgagggc gtagtggcttt
120
ctgggggaagc accatcccta gggacctccg cggtcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagagggtgg catgcacgtc gctgaaaggg
300
aggcctgggc ccgaggcctg ggtgtgggga cgcttgagga gactgtacag tgtggagtcg
360
gggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

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Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
 20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
 35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
 50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

65              70              75              80
Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val
85
Ala Glu Arg Gln Ala Trp Ala Arg Gly Leu Gly Val Gly Thr Pro Glu
100              105              110
Glu Thr Val Gln Cys Gly Val Gly Ala Ala
115              120

<210> 2413
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2413
cccgggagag ttgggcgggg caggggtgtt catggcatac tcgggattgt gtcatttggt
60
gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg ggttcttctt gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
ggctgagggt agctcttccc atggagtgca tccttctcta tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggctggag attgcatgga ggcgccgccc ccccaacca atttttggat
420
aatgacacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg tacccacaag
540
ccacaggtcc ctctgaacct gtaaatcagg tcttgggagc tattcgagca ggctggattt
600
tctccttgc ctcgggggac ctgagagtaa gttacagact tcatgacctt tcaccccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagtcca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

<210> 2414
<211> 137
<212> PRT
<213> Homo sapiens

<400> 2414
Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
1              5              10              15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
20              25              30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Tip Gln Asn Leu Gln Ser

```


	35		40		45
His	Ile	Cys	Trp	Ala	Glu
50				55	
Leu	Trp	Pro	Pro	Phe	Asn
65				70	
Gly	Gly	Ala	Gly	Pro	Cys
				85	
Ser	Phe	Cys	Ser	Ala	Ala
				100	
Trp	Trp	Gly	Pro	Ala	Leu
				115	
Gly	Lys	Ser	Ser	Pro	Gln
130				135	

<210> 2415

<211> 2164

<212> DNA

<213> Homo sapiens

<400> 2415

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 agatcctgaa gccagaactc caccgccgcg cccgcgccat gcggcgaggag aggtgcggcg
 120
 cccccacccc cgctcgccgc catggagggtg ctgcggcgct ctctgggtctt cgctgcggag
 180
 atcatggagc cctttgatcg ctggcccaca gacaaggagc tggtgcccca ggctaaagca
 240
 ctaggccggg agtacgtgca cgcgcggcct ttgcgcgcgc gcctctctctg gagcgctcca
 300
 gagcgtgcct cgccctcccc tggaggagcg ctggctgagg tgtgcgcggt gctgctgcgc
 360
 ctggcgatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
 420
 cacactctccc tgcagtttga gcctgtggtg accgatgcgt tcttgggcgt ggctggccac
 480
 atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggcccggggg
 540
 ctggccgttg actgtgtgag gcaggcccag cctgccattg tccacgcctt cgtggactgc
 600
 ctgggggagt tcgtgcgcaa gacctggga acctggctgc ggagacgcgg cggatggact
 660
 gatgtcttca agtgtgtggt cagcacagac cctggcctcc gctcccactg gctggtggct
 720
 gcaactctga gcttcggccg ctctctgaag gctgccttct tcgtgctgct gccagagaga
 780
 tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
 840
 cagcacccca acacatcttc ctctctccca cccgagcctg gagcactcta acctcggaga
 900
 cccctaagc cccgttcttc cgcagaccca ggccctccgg aagggtgagt ggggaggggc
 960
 tttctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
 1020

ctctgtgat ctctgtgttt tcccttttct tctctggggc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg ccgsggaaca cctgctctca
 1200
 cctgagcccc tgggtgaaggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca ctgctctca
 1320
 cctgagcccc aggtgaaggg gcccggaac acctctcacc tgaaccggg ggtcccatcc
 1380
 caggagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aagggttaca tgctggttgc ttaatccgtt tctggaggaa gagtatgaca cccactgtg
 1560
 atggggctct tgctcggtgg ggaccggggc cgsggggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtggaggg tgaggggtgac cccatctgct atttttgctc tcatcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcatgccc tgggaagccc agccccctag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcatctt
 1860
 tccctggagc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacc cctgagccc
 1980
 tcccggccag gcttcgtgct ggggtgggccc atgtgccagg acaggagggg cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtataaaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met Glu Val Leu Arg Arg Ser Ser Val Phe Ala Ala Glu Ile Met Asp
 1 5 10 15
 Ala Phe Asp Arg Trp Pro Thr Asp Lys Glu Leu Val Ala Gln Ala Lys
 20 25 30
 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu
 35 40 45
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu

50	55	60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met		
65	70	75
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser		80
	85	90
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly		95
	100	105
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr		110
	115	120
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro		125
	130	135
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys		140
145	150	155
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu		160
	165	170
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val		175
	180	185
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val		190
	195	200
Leu Leu Pro Glu Arg		205
210		

<210> 2417

<211> 615

<212> DNA

<213> Homo sapiens

<400> 2417

nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta
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 aagctgattt gattttcata ttgatacctc aatagttaa tgaaggacta gttattgctc
 120
 cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
 180
 acgttttttc acaactgtga tccacgccc agttgcaaat aatcaacata gaaaaattaa
 240
 ataacataat tgatgaaaag ttagtttttc acaaaaaaac gaaaaatttc atcacctaga
 300
 gaggaataat ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggggagaa
 360
 aaatccacaa atccttttgc ttccaacat tatgatgcta atcaagtaat ttaggttaaa
 420
 actatggctg aacattttac cttaacggtg tggtattggc ataccttttg ctggaatggg
 480
 aatgatattg ttgggctagg ttctttggaa cgaagtgggc agaaaaattc aaatttgctt
 540
 gctggcgcag aacaaaaagc cgatattgct tttagtattt tgaataagtt aggcgtgcct
 600
 tattattggt ttcat
 615

<210> 2418

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

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<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctcgt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttcctgcctg cagctgaggg gtctgttttg tgctccttcc
120
gtctcttctt cactacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat ccccaggtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tcagaaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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85 90 95

Lys Ile

<210> 2421
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 2421
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 tactgggtgt ttgacagtgc agggcttggtg cacagacgtg agccacaggg cagcacaacg
 120
 ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg
 180
 ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga ttctctgttc
 240
 gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg
 300
 gttgaagata atcggaagt gaaaagcctg attgaagcgc cggagtttaa ataccggcc
 360
 ggtattagcg tagtgcgttc aattcgtaaa aagttccccc acgctggagt gtgctgcgca
 420

<210> 2422
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2422
 Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln
 1 5 10 15
 Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala
 20 25 30
 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys
 35 40 45
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala
 50 55 60
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg
 65 70 75 80
 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg
 85 90

<210> 2423
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 2423
 tgatcaagtc ggaggattcg gcagggcgca gccatgaacg agaaggcgtc cgtctccaag
 60
 gagctcaacg ccaagcacia gaagatattg gaaggctctc tacggcatcc tgagaataga
 120

gaatgcgcag actgcaagtc aaagggctct c gatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgttctgg cattcataga agcctggggg tgcacataatc taaggtaaga
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
 300
 gaaaaagcaa atagctattg ggaagcagag ctgectccta actacgatag ggttggaata
 360
 gagaatttga t
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1			5						10					15	
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20					25					30			
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35				40					45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50				55					60					
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70					75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90					95		
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

accgggttgc aggcctggaa agacgggcat ttcgacctgc tgatcgctga ctgcaacatg
 60
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 120
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 180
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 300
 gacggcctgc acgcccctgac cggggggcag ccgctgctga tgcgtcgtct gatcgacgag
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 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
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 Asp Cys Asn Met Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
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 tggagcgtaa aatgttgcag agccagccta gaagccagga ggagcagaca ccctgtgat
 120
 ggagcccaac aagaaagatg ttgtgtccct cctgggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tcttccagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatacctt aatatccagt gacttcacatc ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
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 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

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      50              55              60
Asn Val Pro Leu Ser Gly Lys Val
65              70

<210> 2429
<211> 428
<212> DNA
<213> Homo sapiens

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120
gatgtcctgc tcaatggggt agagacgtcg accggtcgc agccgggtgc gcttgctttg
180
ctggaaacagg ccgtacatga gctggatggc actgggggatg ctgatcctcg cgccgctgag
240
ttggctgagc gcgcccgcca gatgtcgtat gacctcactg acctcgctgc ttgcgtcgct
300
ggccatcgcg ctcgggctga agctgatccg caacggcttg aggaattggg gggctgcttg
360
gcggctattc agcggctgtt gagggcgcg accaccacc tcgacgatct cctcgactcc
420
actggcgc
428

<210> 2430
<211> 142
<212> PRT
<213> Homo sapiens

<400> 2430
Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu
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Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
20          25          30
Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
35          40          45
Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
50          55          60
Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
65          70          75          80
Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
85          90          95
Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
100         105         110
Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
115         120         125
Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
130         135         140

<210> 2431
<211> 409

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<212> DNA

<213> Homo sapiens

<400> 2431

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 120
 aatggcgagg taacaatttc tggggcaaaa aatgccgat taccatcct attgtgtact
 180
 ttattatctg aggggtgat caatttaagc aatgtaccgc ttttaaaga tattgccacc
 240
 actatcgagt tgttaaaga gctgggtgct actgtactc agactcaaca ctgcgtgcat
 300
 attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
 360
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 409

<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

Met	Gly	Gln	Phe	Ile	Ile	Gln	Gly	Gly	Cys	Gln	Leu	Asn	Gly	Glu	Val
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Thr	Ile	Ser	Gly	Ala	Lys	Asn	Ala	Ala	Leu	Pro	Ile	Leu	Phe	Ala	Thr
			20				25					30			
Leu	Leu	Ser	Glu	Gly	Asp	Ile	Asn	Leu	Ser	Asn	Val	Pro	Leu	Leu	Lys
			35				40				45				
Asp	Ile	Ala	Thr	Thr	Ile	Glu	Leu	Leu	Lys	Glu	Leu	Gly	Ala	Thr	Ala
			50			55				60					
Thr	Gln	Thr	Gln	His	Cys	Val	His	Ile	Asn	Ala	Lys	Glu	Val	Lys	Asn
			65		70				75					80	
Tyr	Thr	Ala	Ser	Tyr	Glu	Leu	Val	Arg	Ser	Met	Arg	Ala	Ser	Ile	Leu
			85					90						95	
Ala	Leu	Gly	Pro	Leu	Val	Ala	Arg	Phe	Gly	Glu	Ala				
			100					105							

<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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 aggtacacc acacagccga ggcgtgtgga ggactatacc atctgggttt acgtaagtgc
 120
 gctctatgat gctcacgtaa caatgaaac acggaatctc tctctcagaa catttcccg
 180
 ttgtgaagca gcacgtgact ataactcttt cccagggtta cccctgaagt tcaagtgcac
 240

tgccccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
 300
 cgggccagacc gggcgggcag tgggggttgg ggggggggtt gaccattgg tgctgccacg
 360
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 420
 atctggggac atcagggaaa gcagcaaggg tctggctgat tgtgcaaaaa gaactttttc
 480
 tgtgactgcc gtgttccaaa cacacccttt gcttttataa aaaccccaac tgggagggtt
 540
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggaggttaat
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 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
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Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25				30			
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
		35				40					45				
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp	
		50				55				60					
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65				70				75						80	
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85					90						95	
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100				105					110				
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
		115				120					125				
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 120
 gcagatatgg accaagcggg ccaggggtgcg atggggccca agatgcgcaa tatcgccgag
 180
 gcctgcacgg cagctaaccg cttcttggtc cagcagtcgt ttgctgagga gttctctgag
 240

aaatcgcttg cggagtttga gaagctcaat ctgggcaatg gtatggacga aggtattacc
 300
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggt ggacgatgct
 360
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 401

<210> 2436
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2436
 Lys Leu Ser Phe Thr Gly Ser Thr Pro Val Gly Arg Thr Leu Leu Lys
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 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn
 20 25 30
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln
 35 40 45
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala
 50 55 60
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu
 65 70 75 80
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp
 85 90 95
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser
 100 105 110
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser
 115 120 125
 Thr Gly Gly Lys Arg
 130

<210> 2437
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 2437
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 120
 atggtagtga tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc
 180
 tcttaaatcc caccacttac tgtgacacag tgaccggtcc ctgcagcgga ctggatagtt
 240
 gtatcagagt cctggacgga aacagatggc actcaaaagg tggcgcgag ttcagagaaa
 300
 tgccctatga cggatttggt ccaatgcctc agcctgacct cagggaacct cgggggtctg
 360
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<210> 2438

<211> 99

<212> PRT

<213> Homo sapiens

<400> 2438

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Met Val Glu His Glu Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr
 1          5          10          15
Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
 20          25          30
Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35          40          45
Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50          55          60
Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65          70          75          80
Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85          90          95
Ile Ala Val

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<210> 2439

<211> 4425

<212> DNA

<213> Homo sapiens

<400> 2439

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120
atgtatctgt cttccacgga gccgccagcc gctgctgaat gggcatgtct gctgcgccct
180
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240
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300
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420
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480
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780

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<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

Pro Ser Ala Ser Asp Gln Ser Thr Trp Tyr Leu Asp Glu Ser Thr Leu
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 20 25 30
 Val Val Phe Ser Asp Val Asn Ser Met Tyr Leu Ser Ser Thr Glu Pro
 35 40 45
 Pro Ala Ala Ala Glu Trp Ala Cys Leu Leu Arg Pro Leu Arg Gly Arg
 50 55 60
 Glu Pro Glu Gly Val Trp Asn Leu Leu Ser Ile Val Arg Glu Met Phe
 65 70 75 80
 Lys Arg Arg Asp Ser Asn Ala Ala Pro Leu Leu Glu Ile Leu Thr Asp
 85 90 95
 Gln Cys Leu Thr Tyr Glu Gln Ile Thr Gly Trp Trp Tyr Ser Val Arg
 100 105 110
 Thr Ser Ala Ser His Ser Ser Ala Ser Gly His Thr Gly Arg Ser Asn
 115 120 125
 Gly Gln Ser Glu Val Ala Ala His Ala Cys Ala Ser Met Cys Asp Glu
 130 135 140
 Met Val Thr Leu Trp Arg Leu Ala Val Leu Asp Pro Ala Leu Ser Pro
 145 150 155 160
 Gln Arg Arg Arg Glu Leu Cys Thr Gln Leu Arg Gln Trp Gln Leu Lys
 165 170 175
 Val Ile Glu Asn Val Lys Arg Gly Gln His Lys Lys Thr Leu Glu Arg
 180 185 190
 Leu Phe Pro Gly Phe Arg Pro Ala Val Glu Ala Cys Tyr Phe Asn Trp
 195 200 205
 Glu Glu Ala Tyr Pro Leu Pro Gly Val Thr Tyr Ser Gly Thr Asp Arg
 210 215 220
 Lys Leu Ala Leu Cys Trp Ala Arg Ala Leu Pro Ser Arg Pro Gly Ala
 225 230 235 240
 Ser Arg Ser Gly Gly Leu Glu Glu Ser Arg Asp Arg Pro Arg Pro Leu
 245 250 255
 Pro Thr Glu Pro Ala Val Arg Pro Lys Glu Pro Gly Thr Lys Arg Lys

	260		265		270
Gly Leu Gly	Gly Val Pro Ser Ser Gln Arg	Gly Pro Arg Arg Leu			
275		280		285	
Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro Gly Gly					
290	295		300		
Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys Gly Ser					
305	310		315		320
Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser Ser Leu					
325		330		335	
Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu Ala Leu					
340		345		350	
Gly Ala Glu Ala Ser Thr Phe Gly Gly Phe Pro Glu Ser Pro Pro Pro					
355		360		365	
Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu Pro Glu					
370	375		380		
Pro Pro Asp Thr Tyr Glu Glu Asp Gly Gly Val Tyr Phe Ser Glu Gly					
385	390		395		400
Pro Glu Pro Pro Thr Ala Ser Val Gly Pro Pro Gly Leu Leu Pro Gly					
	405		410		415
Asp Val Cys Thr Gln Asp Asp Leu Pro Ser Thr Asp Glu Ser Gly Asn					
420		425		430	
Gly Leu Pro Lys Thr Lys Glu Ala Ala Pro Ala Val Gly Glu Glu Asp					
435		440		445	
Asp Asp Tyr Gln Ala Tyr Tyr Leu Asn Ala Gln Asp Gly Ala Gly Gly					
450	455		460		
Glu Glu Glu Lys Ala Glu Gly Gly Ala Gly Glu Glu His Asp Leu Phe					
465	470		475		480
Ala Gly Leu Lys Pro Leu Glu Gln Glu Ser Arg Met Glu Val Leu Phe					
	485		490		495
Ala Cys Ala Glu Ala Leu His Ala His Gly Tyr Ser Ser Glu Ala Ser					
500		505		510	
Arg Leu Thr Val Glu Leu Ala Gln Asp Leu Leu Ala Asn Pro Pro Asp					
515		520		525	
Leu Lys Gly Lys Lys Asn Lys Val Ser Thr Ser Arg Gln Thr Trp Val					
530	535		540		
Ala Thr Asn Thr Leu Ser Lys Ala Ala Phe Leu Leu Thr Val Leu Ser					
545	550		555		560
Glu Arg Pro Glu Arg His Asn Leu Ala Phe Arg Val Gly Met Phe Ala					
	565		570		575
Leu Glu Leu Gln Arg Pro Pro Ala Ser Thr Lys Ala Leu Glu Val Lys					
580		585		590	
Leu Ala Tyr Gln Glu Ser Glu Val Ala Ala Leu Leu Lys Lys Ile Pro					
595		600		605	
Leu Gly Pro Ser Glu Met Ser Thr Met Arg Cys Arg Ala Glu Glu Leu					
610	615		620		
Arg Glu Gly Thr Leu Cys Asp Tyr Arg Pro Val Leu Pro Leu Met Leu					
625	630		635		640
Ala Ser Phe Ile Phe Asp Val Leu Cys Ala Pro Val Val Ser Pro Thr					
	645		650		655
Gly Ser Arg Pro Pro Ser Arg Asn Trp Asn Ser Glu Thr Pro Gly Asp					
660		665		670	
Glu Glu Leu Gly Phe Glu Ala Ala Val Ala Ala Leu Gly Met Lys Thr					
675		680		685	
Thr Val Ser Glu Ala Glu His Pro Leu Leu Cys Glu Gly Thr Arg Arg					

690		695		700
Glu Lys Gly Asp Leu Ala	Leu Ala Leu Met	Ile Thr Tyr Lys Asp Asp		
705	710	715	720	
Gln Ala Lys Leu Lys Lys	Ile Leu Asp Lys Leu	Leu Leu Asp Arg Glu Ser		
	725	730	735	
Gln Thr His Lys Pro Gln	Thr Leu Ser Ser Phe	Tyr Ser Ser Ser Arg		
	740	745	750	
Pro Thr Thr Ala Ser Gln	Arg Ser Pro Ser Lys	His Gly Gly Pro Ser		
	755	760	765	
Ala Pro Gly Ala Leu Gln	Pro Leu Thr Ser Gly	Ser Ala Gly Pro Ala		
	770	775	780	
Gln Pro Gly Ser Val Ala	Gly Ala Gly Pro Gly	Pro Thr Glu Gly Phe		
	790	795	800	
Thr Glu Lys Asn Val Pro	Glu Ser Ser Pro His	Ser Pro Cys Glu Gly		
	805	810	815	
Leu Pro Ser Glu Ala Ala	Leu Thr Pro Arg Pro	Glu Gly Lys Val Pro		
	820	825	830	
Ser Arg Leu Ala Leu Gly	Ser Arg Gly Gly Tyr	Asn Gly Arg Gly Trp		
	835	840	845	
Gly Ser Ser Gly Arg Pro	Lys Lys Lys His Thr	Gly Met Ala Ser Ile		
	850	855	860	
Asp Ser Ser Ala Pro Glu	Thr Thr Ser Asp Ser	Ser Ser Pro Thr Leu Ser		
	865	870	875	
Arg Arg Pro Leu Arg Gly	Gly Trp Ala Pro Thr	Ser Trp Gly Arg Gly		
	885	890	895	
Gln Asp Ser Asp Ser Ile	Ser Ser Ser Ser Asp	Ser Ser Leu Gly Ser		
	900	905	910	
Ser Ser Ser Ser Gly Ser	Arg Arg Ala Ser Ala	Ser Gly Ala Arg		
	915	920	925	
Ala Lys Thr Val Glu Val	Gly Arg Tyr Lys Gly	Arg Arg Pro Glu Ser		
	930	935	940	
His Ala Pro His Val Pro	Asn Gln Pro Ser Glu	Ala Ala Ala His Phe		
	945	950	955	
Tyr Phe Glu Leu Ala Lys	Thr Val Leu Ile Lys	Ala Gly Gly Asn Ser		
	965	970	975	
Ser Thr Ser Ile Phe Thr	His Pro Ser Ser Ser	Gly Gly His Gln Gly		
	980	985	990	
Pro His Arg Asn Leu His	Leu Cys Ala Phe Glu	Ile Gly Leu Tyr Ala		
	995	1000	1005	
Leu Gly Leu His Asn Phe	Val Ser Pro Asn Trp	Leu Ser Arg Thr Tyr		
	1010	1015	1020	
Ser Ser His Val Ser Trp	Ile Thr Gly Gln Ala	Met Glu Ile Gly Ser		
	1025	1030	1035	
Ala Ala Leu Thr Ile Leu	Val Glu Cys Trp Asp	Gly His Leu Thr Pro		
	1045	1050	1055	
Pro Glu Val Ala Ser Leu	Ala Asp Arg Ala Ser	Arg Ala Arg Asp Ser		
	1060	1065	1070	
Asn Met Val Arg Ala Ala	Ala Glu Leu Ala Leu	Ser Cys Leu Pro His		
	1075	1080	1085	
Ala His Ala Leu Asn Pro	Asn Glu Ile Gln Arg	Ala Leu Val Gln Cys		
	1090	1095	1100	
Lys Glu Gln Asp Asn Leu	Met Leu Glu Lys Ala	Cys Met Ala Val Glu		
	1105	1110	1115	
Glu Ala Ala Lys Gly Gly	Gly Val Tyr Pro Glu	Val Leu Phe Glu Val		

1125 1130 1135
 Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser
 1140 1145 1150
 Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
 1155 1160 1165
 Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly
 1170 1175 1180
 Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Ala Thr
 1185 1190 1195 1200
 Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
 1205 1210 1215
 Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
 1220 1225 1230
 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
 1235 1240 1245
 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
 1250 1255 1260
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
 1265 1270 1275 1280
 His Gly Lys Ile Leu Gly Ile His Arg Gly Leu Glu Trp Val Leu Trp
 1285 1290 1295
 Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp
 1300 1305

<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

nacgcgtgtg tgtctgcatg catccatgtg tctgtacatg tatgtctcca tgtgtggtgt
 60
 ggaggacaca gaaggatgga gggaaaggca ccactcacag aggcggcgct ggagaatttt
 120
 ccatttgtaa ttttgggttt ggtgaacatg cactttgcgt catgcaaatc aggtttctaa
 180
 acattaacaa ccggagagaa atgacatttt ggggccgcgc gtgactcttg cgtgcctctg
 240
 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccacc ccaggggccca
 300
 gcctcgggca ggaagggtac aaagccccc cgtgtgttct gccacgaggt ctcttgaaa
 360
 tgagggggaac agcacagcga cgtccttgcg tcttaaatgc atccccgtgt ggcggttttt
 420
 cgccacacag gcttgggcaa atctctgcgt cactgagcag cattttaacc tcttgaatga
 480
 gatgcctccg accttttggg tctcttttct gcacctctca ggggacaggt cccgtctgta
 540
 cggcgctgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggt
 600
 gggaggctcc tgcaagggtg tgcgtctggc cataagtccc actgccttct cccactgct
 660
 ggcctgtgcc cagcagttcc ggaagcagac ccaggccag gtgtacagtg aggacatggc
 720

cctgaacata ggctcggaac cagaaggcct gcaggtggaa gagaaggagc gccctgtgca
780
gaggctcagt agcgtcctgg ggccctcgga ggagctctcg cagccgctat tcccctgct
840
cagcctctcc aaggccagag tgcagacacc tgcggttggt gccgattcag ggaagtcgaa
900
gggcaagac aaggagagga aaacgtccac aggacaacac agcacagtcc agcctgaggt
960
tgccgataag atagtctctgg tcacagacag acatctctcg gagctgccac tsgaaggtct
1020
ctctgtgttc gatgaaggga caatttcttc tgtgtcacga gaattttctc ttcaaatgct
1080
gtggaatcgc ctccataaag aagagacaga aggtggcggtg aaaaaggagg gaagaagcag
1140
agaccccaaa aagagaagcc tagcgaagaa gggcaggaa ggcagcatcc ccgggacct
1200
ccccctgac tgcacatag tcgactcaga caacttcaag ttctgtctgg acccatacga
1260
ggaggccag gggccgaaa tgctaactcc tgtctccac acccaagaca ttttggaaa
1320
attccaagac acattcacgt cgcgatgggc gggacatctg ggaagcaagc actttccag
1380
ccaggccag tgggagcagg ccctgggcag ctgcagcggt ttctttctct atggaatgga
1440
gagcttctcg tcccatatat tagtggagag attggtcgcc atgaacttgc aagagtcca
1500
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaaggagg acatggagag
1560
cgtggagcac aggagatctg ttggccggtg ggaagccaat tggagaaaac gtgctctcc
1620
ttcagaagat gagtggcgac gaggcggtga accaaggcga ggcttctcag accttgaagg
1680
acaagctgct gctgctccaa agctccgagc tecttccac cacgctcaac ttggtctgt
1740
atgggctgcc gcaccaagcc atcgggtagt gcaggcctgg acctgctcc catcagctgc
1800
tggggcccca gcacttgctc ctgcccctgg ctctgcccc ctgccaaacc atccccacct
1860
cccggtctcc atccccagct ccagctcgc tctcccttc ctgggctctc cccagccct
1920
tggtgcagcc tcagccaggg accctccccc agcgacttcc cgaaggcag cgcctggag
1980
ctcagctctc gctgctctgt gtgcgccatg ggggtctgct cggggcttga gctgctctc
2040
ttccgggggc caggacaagg gggcctccc cttggcgcg cgtgtctga gttgcttaga
2100
ccagaagact attcagaccg tgagcctggt ttgtatttga gtgttccact aaacaaacaa
2160
caaaagccca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
2220
aaaaaaaaaa aaaaaaaaaa aaaa
2244

<210> 2442

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2442

```

Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro
 1           5           10           15
Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
 20           25           30
Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
 35           40           45
Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
 50           55           60
Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
 65           70           75           80
Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
 85           90           95
Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
100           105           110
Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
115           120           125
Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
130           135           140
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
145           150           155           160
Lys Lys Lys Lys Lys Lys
165

```

<210> 2443

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2443

```

nccgtgcgcg cttatcttgcg tcgtacgcccg tccaggggaag atgaaaaaat gctacaaaacg
60
gccgatggac gattgcccac tgatatcgaa tccatgcccga cttttgtaga gggcaaaaga
120
gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
180
atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
240
cgtgccattg ataccatata caaaaacatt cgccagaaga ttgaagcgga tcgcaaaaac
300
ccgctctata tccgcacggt ttatggtgtc gggtatctgc ccggaggctt tgatgaagct
360
t
361

```

<210> 2444

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1 5 10 15
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
 20 25 30
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
 35 40 45
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
 50 55 60
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
 65 70 75 80
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
 85 90 95
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
 100 105 110
 Leu Pro Gly Gly Phe Asp Glu Ala
 115 120

<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcaactgactc caaccacaac
 60
 ctccccctta ttgatatacc tgctcttggc agaaggatgg agaagagca tcgcacaaaag
 120
 aggaagcatg ttatctctgt tcagattact gcttctgccca ggctgctgct gctgttgggt
 180
 tctgcacatt tgctctttat taagcaaatg tcagagctgg gtgctggcaa gggaatcccc
 240
 tgtatttaca caggtaaacc tgagagccag agggcccca accatcctgg ctgcgagggga
 300
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
 360
 aataaaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
 403

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1 5 10 15
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
 20 25 30
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
 35 40 45
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
 50 55 60
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

65              70              75              80
Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe
              85              90              95
Thr Gln Glu Pro Glu Lys
              100

```

```

<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens

```

```

<400> 2447
naccgctcga ggtttgcag tcacgggttg cgggtggggc aggtactact caccgtcaat
60
gacctggtgc ggcccacttc gtaccgcaat gcctgggtcaa cctcgacac tttgctgggg
120
ttgggcgtcg tgccgatcgt caacgagaac gacacggtcg ccaccggaga aattcggttt
180
ggcgataatg atcggcttgc tgccctggta gccgagctgg tgcgcgctca agccctcatt
240
ctgctctctg acgttgacgc cttgtacacc gcccatccgg attcaccgga tgctcgtcgc
300
gtggagggttg tggaggacat cgatgcattg gatgtcgata ccataaagc tggttcgggg
360
gtgggaacgc gcggcatgac cagaaaactt gaagccgcc ccgaatggccac ctgtgccggg
420
gtaccggttg tactcgagc ggcggttgat gccccggacg ttctggcttg tgccccctg
480
gggtacctact tccgcccgct ggcgacgcga cggccccgac ggttgctgtg gttggccgac
540
gctgccaccc cgcagggaca gatcgtcatc gacgacggag ctgtcgaagc tttgacacag
600
cgctattcct cgttggttgc ggtgggtgtg actcgggtac acggggattt ccaagcaggc
660
gaccacagtga cgatcctggc ctccgacggt cgagttgttg gtccggttat cgcccagttc
720
tcccatgatg aggtgcgcgt catg
744

```

```

<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens

```

```

<400> 2448
Xaa Ala Ser Arg Phe Ala Ser His Gly Leu Arg Val Gly Gln Val Leu
1              5              10              15
Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp
20              25              30
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn
35              40              45
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
50              55              60
Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

```

```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100          105          110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115          120          125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130          135          140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145          150          155          160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165          170          175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180          185          190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195          200          205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210          215          220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225          230          235          240
Ser His Asp Glu Val Arg Val Met
      245

```

<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgtctc cccctcctcc ctgggccctg tctatcccc agaggccaga caggccttcc
120
tcgcattgcaa gaggctccct cgccctgcgc gacagtggcc tccatctacc tgccgtgtctt
180
gctggactcc agaactacc agtcctttcc cccctggggg ttgggggggg ccccccttt
240
ttttccccc ctttccctct tcattccaca ggaggccaga ctcaactcc cncncc
296

```

<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20          25          30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35          40          45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451

<211> 589

<212> DNA

<213> Homo sapiens

<400> 2451

```

naccgctgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgatc
60
tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tcggggctct cgctcgtgcc gcogaatcgc agccggggcg ctcgtcccat
180acgcatggct cattacgggt cgccttgat caggtcggtc gaatgctgcg      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccactcctgac gtcaccctcg tgcgtactga ggcgtgtctt
360
attggcgctg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cgggggcgctcc ccagggttgt cgctcgtcga gatgccgacc gcactactga acgcggaagt
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctgggt gctgtgtgac
540
cctactccag aggaagctat cgtcacgata aggtcgagat gtcggcgccc
589

```

<210> 2452

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2452

```

Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
100             105             110
Thr Glu Ala Leu Ser Ile Gly Val Asp
115             120

```


<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
 nnacggtca gccatctgtg agtgcctaca ctatacacac atccccgggc acactcaggg
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 agattcacac attcctacga gcacacatgt gcttgcata gttattcccc atgtgaacac
 120
 acagggttggc acacgcacat gcccttgggt atgtctatgt ccattcattcc atccccagct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtgggtgca cacacactcg tgcacacgga gccacaccag cacatgtcca
 300
 gaggcatttg tgtgcgtggg catttgcagc atgactcaga acggagtatg ggggtggcgg
 360
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatctcgg
 420
 ccaggcaact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctgtctga agcctgtcac gaatgcagga tcaatggcct ctccccctgg
 540
 gaccggccac gacgcagtc ccacagggac caccaggtga catgggtgct gcaataggca
 600
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggaccggact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> FRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130	135	140
Leu Ser Pro Arg Asp Arg	Pro Arg Arg Ser Ala	His Arg Asp His Gln
145	150	155
Val Thr Trp Val Leu His		160
	165	

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2455
 acgcgtcggc agaagcggtca gctgaccgtc ggagccgacg tgccccagg cgtcgtcagg
 60
 ggaaccgcgc agaaggaaat ccaacgcgctg ccgatcatga aggcgctccc catggcgctc
 120
 aaagaactcg ttctgggcca atcggaagtgg caggacgagt tgatcaacaa cttcatcgctc
 180
 gcgctgtttg caggcggtgtt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
 240
 ctgccgcgct tcataacgt gatgtcgctg gcggtggcac cgtggggcgg gttgatcggc
 300
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc
 360
 ggcatcgctg ccaagaat
 378

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2456
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
 1 5 10 15
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
 20 25 30
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
 35 40 45
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
 50 55 60
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Tyr Arg Arg Leu
 65 70 75 80
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
 85 90 95
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
 100 105 110
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
 115 120 125

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457
 cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
 60
 atgagcgaat gtgacatctt gcacactctg cgtgggtctt ctgggctccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttatt aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaatatga tggtagaata
 240
 gtagaggaat acttcgctcg acagatctca tcttctgtga gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggccagc gtcttttttg gatgagcatt tttctaagat ggctgctgag actgactctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagagggg acaactgaga
 540
 aaccttccaa ggagaaaact caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcttgccgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5					10					15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
			35				40						45		
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
			50				55				60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65				70					75					80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
			85						90					95	
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
			100					105					110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
			115				120						125		
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
			130				135						140		
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145             150             155             160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
165             170             175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
180             185             190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
195             200             205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
210             215             220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225             230             235

```

<210> 2459

<211> 382

<212> DNA

<213> Homo sapiens

<400> 2459

```

accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctggtcttgg agggcgccgt cgtggtcgag aaggtcgctg gtctgccccg aggcacgggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg cgggcatcat tgacccggcc
180
aagggtgaccc gttcggtctc gcagaacgcc gcgtccatcg cggccctggt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gtaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

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<210> 2460

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2460

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Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1             5             10             15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
20             25             30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
35             40             45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
50             55             60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65             70             75             80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
85             90             95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100             105             110

```

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa aggggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
 60
 tgcaatgctg ttgtgctca tgcctggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgatgtggta ttgcagtcg cggatagcct gcaacacacc tacaccaat tgcgcgacgg
 180
 ctgggttcggc agccctaagg tgtgcataac gatgctggga tggccgctga tggcgtcgac
 240
 ggctggaaaag tcgaactcag ccagatggcg ccgctgcgg acgcgcacga cctgtacttc
 300
 atcaacctcg gcggctacga ggccaacgct ttggcgagg cccatcatta cctgctgggtg
 360
 gtgccccggg acaaacagga agccaagcgc aaggggcagc ggcaaatgtt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggctgct atgttcacct ggtgcaaggc ccgcaccagg cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag
 60
 ttccggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctctggcg
 120
 ccctatggcg aaacccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttctc gacgacgacg ctggcgcttc tgctcggtgg ttgagcggg
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
 nntcatgagg acatttcctt catatttggt ggtggtaaat ccctcctggg acacggggaa
 60
 atgaccagag gctggcgccc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcaactgt ggtgggtggg gctgttggct
 180
 ggggtgatgga taccggctgc cagagatggc tcaggtgccg cgtgctgggc tatctcaggc
 240

actggctgct gggctatctc gggcgccggc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggtgtgct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcggggt
 420
 tttccatctc cgac
 434

<210> 2466
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2466
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
 1 5 10 15
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
 20 25 30
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
 35 40 45
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
 50 55 60
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
 65 70 75 80
 Ser Pro

<210> 2467
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 2467
 atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
 60
 gtccggcgggc caaggaagaa gtccgtgtcg aggtccgtga aggccggtct ccagttccccc
 120
 gtccggcgcca tcgggcgcta cttgaagaag ggcgctacg cgcagcgtgt ccggcaccggc
 180
 gcccccgctt acctcgccgc tgcctcgaat taacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggaaca caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 2468
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

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      1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85           90           95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469
 <211> 489
 <212> DNA
 <213> Homo sapiens

```

<400> 2469
gccggcggtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
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aacagatgag atttcagctg ggacttgcag ccaagtggga ttggcccttt tggggagaag
120
ggaaaggcca ttcaaaggcc agggacagag tatggtcaaa ggcatggaga tgagggaagag
180
gggaccagag cagaggggtca ggttggaagg cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtggaagt gttggagaaa acactttttg gtgtcggttac attgaatctg ctcatctata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470
 <211> 115
 <212> PRT
 <213> Homo sapiens

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<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```



```

65              70              75              80
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
              85              90              95
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
              100              105              110
Ala His Leu
              115

```

<210> 2471

<211> 779

<212> DNA

<213> Homo sapiens

<400> 2471

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tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc
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ctcacatggt ggcctctgac ttctttcaca gtgaggacct ctgcttcacg aggcataaa
120
gaagaggagc taaggactat tttgtcatgg gggcgccaat ccaactgcac ttctactata
180
attctctcat ttccctgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt cccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggt cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gattttctaa agtaccacact ttcagctccc cgcctgcaat gaccatgcac
420
gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aaatgagaac
540
gtcatcccca gggcctggaa tgggtattgtt gtatccctcc cagcctcttt caacaccttg
600
ccatgtttca gggaggagacc attttaaagc tgattcaggg cgagaggtag aagctgaaat
660
agttgggggc ataccttcct tcacccggag aatgacttga acttggcctt cacctaaaac
720
cagatagggt agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779

```

<210> 2472

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2472

```

Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
1              5              10              15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
20              25              30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
35              40              45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50	55	60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg		
65	70	75
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys		80
	85	90
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly		95
	100	105
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val		110
	115	120
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu		125
	130	135
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His		140
	145	150
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His		155
	160	165
Val Thr Glu Asp Gly	170	175
180		

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
 60
 cgcactctgct ccaaggccca cagctggcag cggnggcac ccagaaccca taccggggca
 120
 ccgtgggtgtg gatggtaacn tgagaatgtg gacatctctg tgacctctca caggggacccc
 180
 cagctggacc agtatgagc caaagagtgg acattttatta ttgaaaatga gtctaaaggg
 240
 cagcgggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgccc
 300
 ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
 360
 gagctgagcc tcactctttc cgggggtgct ctgcgggagg gccgtgccac ggacgatgac
 420
 atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac
 480
 tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc cggggctcga
 540
 gtccccccagc caggtgggct cacagcctgc tgtggatoga gactgccaa acctggggag
 600
 ggaggggttac ccggggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
 660
 tgcccaggca gtcccaacca acccagcagc ctcaattg
 698

<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1 5 10 15
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
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 agccccctec tggcctgctg gcagcccatc ctctgctggt tgctgggctc agtgcgtgca
 120
 ggctcgccca cgggctgccc gccccgctgc gactgctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag ctctccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagccccg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcatgtccc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctcttcaag
 720
 aggctgtacc gactcaaggc cttggagatc tcccactggc cctacttgga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgcctt acctggccgt ccgccacctg gtctatctcc gcttctctca cctctctac
 900
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctggtgg gcgggcagct ggccgggtgg agccctgcct tccgcggcct caactacctg
 1020
 cgctgtctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtgggcaacc tggagacact catctgggac tccaaccggc tggcctgcga ctgtcggctc
 1140
 ctgtgggtgt tccggcgccg tggcctacaa acctcaaccg gcagcagccc acgtgcgcca
 1200
 cgcccgagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa Ala Pro Glu Met Gln Val Ser Lys Arg Met Leu Ala Gly Gly Val
 1 5 10 15
 Arg Ser Met Pro Ser Pro Leu Leu Ala Cys Trp Gln Pro Ile Leu Leu
 20 25 30
 Leu Val Leu Gly Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro
 35 40 45
 Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys
 50 55 60
 Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu Leu
 65 70 75 80
 Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu Phe Ala
 85 90 95
 Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu Asn Ile Val Ser
 100 105 110
 Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn Leu Arg Thr Leu
 115 120 125
 Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu Gly Val Phe Thr
 130 135 140
 Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu Asn Lys Ile Val
 145 150 155 160
 Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn Leu Lys Ser Leu

165 170 175
 Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser
 180 185 190
 Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr
 195 200 205
 Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu
 210 215 220
 Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys
 225 230 235 240
 Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu
 245 250 255
 Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu
 260 265 270
 Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg
 275 280 285
 His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser
 290 295 300
 Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile
 305 310 315 320
 Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly
 325 330 335
 Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr
 340 345 350
 Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile
 355 360 365
 Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe
 370 375 380
 Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro
 385 390 395 400
 Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val
 405 410 415
 Leu

<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

nagactgcga tcacacgcgc gtgccagct gaaccagtg cgtgagaagg ctgccttcag
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 gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
 120
 aagtgtgagg agttccctgc cagcctgtca tcagtctccc cagggtctga agcggcgccc
 180
 ctgctcctgg ccgtgacctt ggaccctctg gagaccctta tcaaggatgg catcctctac
 240
 cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
 300
 ggagggcccat caggcgtggc acggctggag aactggggagg tccgggatgg tggcctggga
 360
 gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catcgccctg
 420

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gccccggga caccgggtgcc
 480
 ttctgtctca ccaccaccga gcgaagccat ctactggctg ctacgaccg ccaggcctgg
 540
 atgggccc
 548

<210> 2478<211> 113
 <212> PRT
 <213> Homo sapiens

<400> 2478
 Leu Glu Thr Pro Ile Lys Asp Gly Ile Leu Tyr Gln Gln His Val Lys
 1 5 10 15
 Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly
 20 25 30
 Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly
 35 40 45
 Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly
 50 55 60
 Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala
 65 70 75 80
 Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr
 85 90 95
 Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met
 100 105 110
 Gly

<210> 2479
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2479
 gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
 60
 ttccggcacga gctggatgga ggagaccgca ggcaccttct cactgaaactg gtatcgacgc
 120
 aggtacttggga atgacaatga agcagcagaa aggccttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctccctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctggggagg cggggcgtagc
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480
 <211> 108
 <212> FRT
 <213> Homo sapiens

<400> 2480

```

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1           5           10           15
Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
      20           25           30
Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
      35           40           45
Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
      50           55           60
Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
65           70           75           80
Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
      85           90           95
Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
      100          105

```

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

```

gcgttaccata acgcttcaac aaactcttac aagcgtcttg ttctcggttt cgaagcacct
60
gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
120
agccctaag gcaagcgtat tgaagctcgt tccctgate caaccgctaa cccataccta
180
gcattttcgc ctatgttgat ggctggtatc gatggtatca aaaacaagat tcacctgggc
240
gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
300
gttgctagca gcttagaaga agcgcttaag tgcttagatc aagaccgtga gttcttgact
360
caagggtggc ttttctctga cgacatgate gatgcttaca tcgctcttaa agcagaagaa
420
gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
480
gctt
484

```

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

```

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1           5           10           15
Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
      20           25           30
Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
      35           40           45
Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
      50           55           60

```

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65      70      75      80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
      85      90      95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
      100     105     110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
      115     120     125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
      130     135     140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
      145     150     155

```

<210> 2483
 <211> 477
 <212> DNA
 <213> Homo sapiens

```

<400> 2483
acgcgtgttta gccaaatctt ggttcctccc gttctctcct taccgcagcc tgaggccccc
60
ctggagaaca ggcagcctct gaggaaacct ctgatccccg atcagccacc ccattgcctg
120
cgtccccagc cgtctctctc tggccttggt ccccccctccc tgtgaaggag agaacagttt
180
cggtggcccc tgagatgctg gcaggcctgc agtcaggcca gtgggcgcct cccaccttga
240
aatggctcctt cgtgggtgcag ttctgcttac ggggtagact ttgttgccct ccacagagga
300
cagtttagggg gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtgggaat tctctctgct cctggagtct gggaatgcac ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaacccac cacatccatc tggagccagg aactagt
477

```

<210> 2484
 <211> 130
 <212> PRT
 <213> Homo sapiens

```

<400> 2484
Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1      5      10      15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
      20      25      30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
      35      40      45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
      50      55      60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65      70      75      80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
      85      90      95

```


Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485
 <211> 608
 <212> DNA
 <213> Homo sapiens

<400> 2485
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
 60
 aagacccgcg actgcaacga ggtgctcttt gtgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtagaactt catggccatc agcaaaagacg gtcagctcgt caccgccgag
 180
 ctactgggca ccattcctgcg tggcgtgacc cgcaagtcca ttctggaagt tgcccccgac
 240
 ctgggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccggaagt cttcgcctgt ggtaccgcg cggttgctac accgatcgcc
 360
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccgaaa gaccacgatg
 420
 gagatccgct gccgtctgct ggatatccag ttcggaacgc ctgaggacac ccattggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
 540
 cgatcgggct acgacggtgt cgatgacaat gtcttcgcgc tggaaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 2486
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

```

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
    100                105                110
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
    115                120                125
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
    130                135                140
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
    145                150                155                160
Leu Lys Arg Val Cys
    165

```

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

```

nnccccctcag gagagcagcc catggaaggt cccccccaag gggccctcga gagccctgac
60
agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag
120
aaggaggcgc caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggcctgtccc
180
cagctgggag gggctgctcc tcaggctcct gctgccacc aaaagcccgga ggcctcagtg
240
gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
300
accttggttaa ggctgctgga cattgaagag gctgtgcac
339

```

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

```

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
  1          5          10          15
Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
    20          25          30
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
    35          40          45
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
    50          55          60
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
    65          70          75          80
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
    85          90          95
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
    100         105         110
His

```

<210> 2489

<211> 594
 <212> DNA
 <213> Homo sapiens

<400> 2489
 nacgggttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt
 60
 aactgggttg tcaccatcta tcacggccgg gtgcgatatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagcctt cgcgatcgga ggcgatgaccg gcgtactgct ggccatcccg
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctacttcca caacgtgatc
 240
 atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcgaag gctgcattct ggttctggat ctcgggcctc
 360
 ttgctgcgct tcattgccgt ctatgcactg gggttccatgg gcatgaccgg ttgtttgaac
 420
 gcccccccca cccctgagtg ggtcccgtag ctgtacgttg ccattggtcgg tgcaactgatg
 480
 atcgctgtcg gtatcgctcg ccagttgatt cagctgtatg tcagcgtgcy tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
 594

<210> 2490
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2490
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
 1 5 10 15
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
 20 25 30
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
 35 40 45
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
 50 55 60
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
 65 70 75 80
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
 85 90 95
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
 100 105 110
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr
 115 120 125
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
 130 135 140
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
 145 150 155 160
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
 acggtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc
 60
 actacgttgt tgcttggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttcgag tggtcgaaag cggaactgta ttccgcgcgc tcaactccggc tgcggcaaccg
 180
 cgtcccggtg tcgacgagcg cccctccgat gaagtccctg ccgagatcga cgccgccttg
 240
 ccagccacgc cgcgcacgtc cgcggccgtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cggtaaggcg tgactggcga cacgctgtgc tggtcgcccga gaaggctgct
 360
 gatgctcttg cgcgtgaggct ggtgcgcaag gctgaccgtc aggcctccatg gcatcccggt
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggctcgagtt caatctagat
 540
 gctttggttag cctgcgctcc gagcgggtgt gaggtcatgg ttatttcaag gt
 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

```

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
  130          135          140
Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
  145          150          155          160
Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
  165          170          175
Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
  180          185          190
Met Val Ile Ser Arg
  195

```

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

```

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tggtagccttc aggagcagac
  60
ccccacacct atgagccgctc gctgcgtgac gttcggaaccg tcgtgtattc gagagtcgcg
  120
ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcctta
  180
cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
  240
atccccgtgg ttgaaaaatgc caacctagac accgtgtggc tggggttgcg cgctattggc
  300
aagggcgcca ggcggggagc cgaccgtctc tctcgggtct acctccagct gacgtcgggtg
  360
gagggggcctg gggacttcac tgcctatatc actgggaccc ttggtcgacc tcagatct
  418

```

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

```

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
  1          5          10          15
Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
  20          25          30
Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
  35          40          45
Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
  50          55          60
Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
  65          70          75          80
Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
  85          90          95
Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
  100          105          110
Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
  115          120          125

```

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
 130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

nnggcctggc ccaggtgcac cagcagcgt gcggacactc ggggcggcag tcggtctgtc
 60
 agtcctcccg ccaggtcccg cgcccgccac ctgcccggcg cactgcagc tcgcacctg
 120
 cggccagtgc ctactgccct ctcttgcgc ccgcacctgc agcccgccac ctgcccgttg
 180
 cactgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
 240
 gacgtcaaca cctcgacccg ctctgctatg gaggagggga ggaaggcccg cggcacgggc
 300
 gaggttgacc agctgctcaa ctgctcttgc acagcagtc aagccatctc ttccgggggtg
 360
 cgcaaggcgg gcctgcgcga cctctatggc attgctgggt ctaccaacgt gacagtgat
 420
 caagttaaga agctggacgt cctctccaac gacctgggta tgaacatgtt aaagtcatcc
 480
 ttgtccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
 540
 aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
 600
 cttgtgtccg ttggaacat ttttggcatc tatagaaaga aatcaactga tgagcctttc
 660
 gagaaggatg ctctgcaacc aggcgggaac ctggtggcag ccggtacgc actgtatggc
 720
 agtgccacca tgctggtcct tgccatggac tgtggggta actgcttcat gctggaccgc
 780
 gccatcgagg agttcatttt ggtggacaag gatgtgaaga taaaaaaga aggtaaaatc
 840
 tacagcctta acgagggcta cgccaaggac tttgacctgc ccgtcactga gtacatccag
 900
 aggaagaagt tccccccaga taattcagct ccttatgggg cccggtatgt gggtccatg
 960
 gtggctgatg ttcctgcac tctggtctac ggagggatat ttctgtaccc cgctaacaag
 1020
 aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
 1080
 gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattccaca
 1140
 gacattcacc agagggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg
 1200
 aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgcctgcacg cgggaatgg
 1260
 cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt
 1320

Ala Gln

325 330 335

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
 acgctgtctc tggccggtga aacccttccc gcagcaggtt cagtacgtcg caccggcgag
 60
 ctggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
 120
 atcctgtcag cgctggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaaacg gttccgagga cgaccgtgcc gttcgcatgg acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcgcccg tggctatggc gcctctgcag aggcagcccg aatcgctcg
 300
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcg
 360
 cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499
 nggccggggc aagacccggt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
 60
 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tcctgcgcaa gcgcgacaac ttctgcaaag ccttcgacga ttccagccc
 180
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgcggcgatc
 240
 gtgcgcgaac gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctgcacatc
 300
 atggaaaaag gcccgggcct ctccaggctg ctgtggggact tcgtcgac
 348

<210> 2500
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 2500
 Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp
 1 5 10 15
 Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu
 20 25 30
 Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg
 35 40 45
 Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala
 50 55 60
 Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile
 65 70 75 80
 Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala
 85 90 95
 Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp
 100 105 110
 Asp Phe Val Asp
 115

<210> 2501
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 2501
 gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccca tcaaatcaca
 60
 taatgcccac taagccactc catcaccttc tttaaatagg aaaatatatg taaagtacgt
 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggttatgg
 180
 ctttcaagag tcaacaacatt ttactgggtgc atcatttcca tttattcttt ctcttttgca
 240
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttaccatca aaaaaatcct
 360
 taaggggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2502
 Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr
 1 5 10 15
 Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr
 20 25 30
 Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser
 35 40 45
 Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile
 50 55 60
 Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His
 65 70 75 80
 Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile
 85 90 95
 Phe Lys Gly His
 100

<210> 2503
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2503
 gccacgccag ccatctaccc ttctctcgac tcgccaaata agtatttact gaacatgtac
 60
 aaggccttgc tacctcagca gtccctacagc ttggccacgc cgctgtattc tccagtctgc
 120
 accaatgggg agcgctttct ctacctgcgc ccacctcact acgtcggtcc ccacatccca
 180
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgct
 240
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 300
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<211> 121
 <212> PRT
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<400> 2504
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 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
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 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
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 <212> DNA
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Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala
      35           40           45
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